Specialist Schools: An evaluation of progress

October 2001

Contents

| | Paragraph |
|---|-----------|
| Specialist schools programme | 1 |
| Introduction | 1 |
| The survey | 10 |
| Main findings | |
| Schools visited | 16 |
| How good are standards? | 22 |
| How good is teaching? | 42 |
| How is the curriculum different? | 54 |
| What impact has the extra funding had on provision? | 84 |
| How well is the wider role of specialist schools working? | 113 |
| How successful are the schools in managing their role? | 132 |
| Conclusions | 145 |
| Annexes | |
| A. Schools visited B. GCSE performance | |

Specialist schools programme

Introduction

- The specialist schools programme was launched by the Department for Education and Employment (DfEE)¹ in September 1994 when a small number of grant-maintained and voluntary-aided schools began operating as technology colleges. The opportunity to apply for specialist school designation through open competition has been available to all maintained secondary schools in England since 1995. Since then, the number of schools involved has increased rapidly. The programme has included specialist schools for languages since 1996 and for sport and the arts since 1997.²
- The specialist schools programme was designed to help schools to develop particular strengths and raise standards in a chosen specialism in partnership with private sector sponsors. In addition, from 1997, schools have been expected to become a resource for other schools and their local communities.
- Technology colleges place emphasis on design and technology, science and mathematics; language colleges not only highlight modern foreign languages (MFL) but the development of an international ethos; sports colleges focus on physical education and sport; and arts colleges specialise in the performing arts, the visual arts or the media arts.
- The aims of the programme have been refined since its introduction in 1994. Currently there are six:
 - a. to extend the range of opportunities available to pupils which best meet their needs and interests;
 - b. to raise standards of teaching and learning in the specialist subjects;
 - c. to raise standards of achievement for all their pupils of all abilities;
 - d. to develop within the schools characteristics which signal their changed identity and which reflect the school's aims;
 - e. to benefit other schools and the wider community in the area; and
 - f. to strengthen the links between schools and private and charitable sponsors.
- 5 Specialist schools are required to set targets to reflect the aims of the programme. As a minimum, each applicant for designation as a specialist school must satisfy the DfES criteria by:

¹ Now the Department for Education and Skills (DfES).

The report follows DfES nomenclature in using the term 'specialist schools' for the programme and 'colleges' for schools specialising within the programme. Individual schools are designated 'colleges', although they remain schools in all respects.

- raising private sponsorship to the value of £50,000 (£100,000 until September 2000);
- demonstrate at least reasonable standards, and preferably evidence of sustained attainment by pupils, in the specialist subjects for which designation is sought; and
- present a four-year development plan with targets and performance indicators against which success can be judged, with the targets relating to extended provision, increased take-up of specialist courses and improved learning outcomes.
- Only those schools with well-conceived development plans for both the school and community dimensions are selected for designation. Each school receives a one-off capital grant of £100,000 and annual funding, currently £123 for each pupil a year for up 1,000 pupils, from the DfES. Schools with over 1,200 pupils receive a further £123 for each pupil. Special schools with secondary-age pupils can be designated and receive an annual grant of £615 for each pupil.
- Schools that have made good progress in achieving their targets are eligible to apply for further three-year periods of designation. They have to submit a three-year development plan and new outcome targets. Each school's progress is monitored by the DfES.
- In July 2001 there were 685 specialist schools in operation: comprising 367 technology colleges, 126 language colleges, 91 arts colleges and 101 sports colleges. They are located in 130 local education authorities (LEAs), in both urban and rural areas. A growing number are part of Excellence in Cities and Education Action Zone schemes. The Technology Colleges Trust report, Educational Outcomes of Specialist Schools for the Year 1999, showed that half of specialist schools are located in the hundred most deprived areas of the country.
- 9 The great majority of the schools are comprehensive schools. Under the School Standards and Framework Act 1998 there is provision for schools with a specialism to select up to 10% of pupils by aptitude in the relevant specialism. Of the 403 specialist schools operating in September 1999 about 7% stated that they had taken up this option. The selection tests used are related to the specialism and are a matter for the schools. The DfES does not make any recommendation on the procedures to be used, but these procedures are subject to challenge by admissions authorities.

The survey

- 10 The survey had three purposes:
 - a. to identify the impact the specialist schools programme is having on attainment and the quality of provision in the designated schools;
 - b. to evaluate how schools are managing their role, including their role in relation to other local schools and the wider community; and
 - c. to illustrate good practice and highlight factors accounting for it.
- Evidence came from data about the 327 specialist schools designated and operating on or before September 1998, OFSTED school inspection reports and HMI reports to the DfES on the progress of individual schools. Reference was also made to research commissioned by the DfES on the impact of the specialist schools programme and to a report on sports colleges by OFSTED and the Youth Sport Trust.³
- In addition, Her Majesty's Inspectors (HMI) made special visits in summer and autumn 2000 to 46 schools of the different specialist types: 25 technology colleges, 9 language colleges, 5 arts colleges and 7 sports colleges. The schools were selected from those operating as specialist schools on or before September 1998, that is, for at least two years before the inspection.⁴ They are listed in annex A.
- The visits focused on attainment in the specialist subjects, the quality of teaching, curriculum and enrichment opportunities, and aspects of management, including use of the additional funding. HMI also assessed how effectively specialist schools were fulfilling their community role by visiting schools and community groups involved in the various partnership arrangements.
- 14 HMI did not consider in these visits the impact of specialist school status on patterns of admission to schools in the areas concerned. This will be part of a wider OFSTED study.

³ Sports Colleges: The first two years (OFSTED and the Youth Sport Trust, 2000). The report explored the early development of the role of these colleges in relation to the place of sport and physical education in schools and communities.

⁴ A consequence is that no special schools were included in the survey because none had been working as specialist schools for more than a year.

Main findings

| | Four out of five of the well-established specialist schools covered by this survey are in large measure achieving the aims of the specialist schools programme and making good use of the advantages it brings. For these schools specialist status has often been a catalyst for innovation and helped to sustain or accelerate the momentum of school improvement. |
|-------|--|
| | The fact that this is not the case in one in five schools is a disappointing use of opportunities and resources. |
| Conte | ext of the schools visited |
| | The context of the schools visited varied widely, as did their size and funding. The average proportion of pupils in receipt of free school meals was well above the national figure, particularly in arts and sports colleges; the proportion of pupils on special educational needs registers was below the national average; the proportion from minority ethnic groups was broadly similar to the national average. |
| | Very few of the schools had introduced selection by aptitude. Almost all of the schools visited had seen an increase in their Year 7 intake each year since designation as a specialist school, but it was difficult to distinguish the contribution of specialist status to their increased popularity. The main reasons given for this were the schools' existing good reputation, ethos and examination performance. One third of headteachers saw specialist status as a significant factor. |
| | Most pupils interviewed recognised the benefits these schools look to provide and responded positively to the challenges set. Factors such as the positive image of the specialism, increased access to ICT and greater curricular opportunities at Key Stage 4 and post-16 were included by parents and pupils in the reasons for their preference for the school. |
| | |

Standards achieved

| The results achieved in the General Certificate of Secondary Education (GCSE) |
|--|
| overall by the different types of specialist school vary. More pupils in technology, |
| language and arts colleges are achieving five or more GCSE A*-C and A*-G |
| grades than in maintained schools nationally. The performance of pupils in |
| sports colleges is below the national average in terms of A*-C grades and in line |
| with the average in terms of A*-G grades. |

☐ The trend of improvement in GCSE average points score in specialist schools has been slightly greater than the national rate.

| | In each of the specialist subjects in technology and language colleges the average proportion of pupils gaining A*-C grades in 2000 was higher than the national figure. The proportion achieving this level in the specialist subjects in arts colleges was higher than the national average in all but music. In sports colleges the proportion was slightly below the national average. |
|-------|---|
| | In GCSE examinations in 2000 the combined average points score for each pupil for specialist subjects was higher in technology, language, arts and sports colleges than the average for all other maintained secondary schools. |
| | Attendance was good and improving in the majority of schools. |
| Quali | ty of provision |
| | In over four-fifths of schools visited, there was clear evidence of a distinctive character based on the specialism. In the remaining schools visited there was some lack of commitment to the programme, and even some reluctance to be closely identified with it. In these schools little attempt had been made to promote a strong specialist character. |
| | The profile of teaching in the specialist schools visited was much the same as the national. The percentage of good or very good teaching observed in the specialist subjects varied across the types of school. It was well above the national average in the case of language colleges at Key Stage 3. |
| | Subject departments have developed a range of strategies which are helping to raise standards of attainment. Features of good practice include: effective use of information and communication technology (ICT); close attention to literacy skills; encouraging pupils to take responsibility for their own work; use of refined systems for assessment, monitoring and individual target-setting; and introducing pupils to business practices and the work of professionals. |
| | In over half of the schools visited extra time was provided to expand the range of options at Key Stage 4, by means which included extending the length of the school day or week. There was no evidence that the balance of the curriculum had been significantly disturbed by these modifications. |
| | All schools had provided some enrichment activities to broaden and deepen pupils' experiences and to provide opportunities for them to explore elements beyond their normal studies. Some schools had organised these activities more effectively than others. The main weaknesses were an absence of clear objectives and a lack of coherent organisation, such that some groups of pupils were missing out on opportunities. The use made of links with industry, businesses and professionals varied widely among the schools; there were some very good examples. |
| | Most schools - some four-fifths - had used the capital and annual grants to good effect, and were providing good value for money. These schools were using the |

preferential funding effectively to upgrade facilities and equipment, to increase staffing and provide better opportunities for professional development. Some schools had not clearly linked spending to targets and had not fully capitalised on the opportunity to attract or retain good staff.

Over three-quarters of schools had made good or very good use of both grants to upgrade and extend ICT facilities in specialist subjects and for whole-school use. A minority of schools had not paid sufficient attention to other resources.

Community role

- With few exceptions notably among the sports colleges the community dimension was the weakest element of specialist schools' work. Most schools have found their community role challenging to define and pursue. There were good examples of support for other schools, required under the scheme, in about half of the technology, language and arts colleges visited. In the remainder, objectives were vague and support did not focus sharply enough on learning outcomes. Where implementation had resulted in limited benefits, the resourcing and management of the activities were often inadequate.
- Support for specific groups in the wider community was patchy and was a weakness in many school plans. However, sports colleges have responded well to this opportunity: the community role is one of their strengths.

Management

- Well over four-fifths of the schools had generally effective structures and systems for managing the programme and promoting innovation. Commitment and involvement on the part of the headteacher were usually the critical factors.
- In a smaller proportion of schools visited about two-thirds the management by key heads of department was judged to be making an effective contribution to meeting the specialist school targets. There is much scope for improvement in this respect.
- Weaknesses in management, at school and departmental level, included ineffectual planning, insufficient focus on improving the quality of teaching, tenuous links between funding and targets, and poor monitoring.

Recommendations

- 15. While most specialist schools are making effective use of the programme, the challenge to maintain or accelerate achievement remains for all of them. In order to raise standards further and sustain the effectiveness of the programme, schools should:
 - review the efficacy of management, including planning and monitoring, where targets for provision, take-up and outcomes are not being met;

- concentrate on developing the management skills of heads of specialist subjects;
- maintain the focus on raising attainment by giving close attention to methods of teaching and learning, including harnessing the opportunities created by ICT;
- improve the performance of pupils further by exploring how specialist subjects can contribute to higher attainment generally;
- devise a framework of learning objectives for enrichment activities so that they all have a clear purpose and the range of activities is suitable for all pupils;
- strengthen partnerships with business and industry;
- ensure that spending plans cover resource needs in addition to ICT and are matched to targets;
- do more to share good practice and ideas with other schools;
- develop effective links with the local community in order to make their specialist facilities available to more people, to reflect an emphasis on social inclusion and to ensure that community activities result in measurable gains in achievement for the participants.

Schools visited

- 16 The schools visited were operating in a range of contexts, including disadvantaged areas of the country. The characteristics of the schools visited were as follows:
 - they ranged from relatively small to very large in size;
 - the great majority had a comprehensive intake, but the survey included two grammar and three modern schools;
 - a third of the schools were foundation, 15% were voluntary aided and half were community schools;
 - the average percentage of pupils in receipt of free school meals was well above the national figure, at 28.9%, compared with 17.8% for all maintained secondary schools;
 - the percentage of pupils on special educational needs registers was below the national average, at 16.6%, compared with 19.3%;
 - the average percentage of pupils from minority ethnic groups was broadly similar to the national average, at 12.2%, compared with 11.5%;
 - the total income for each pupil ranged from £2,041 to £3,356, with the average of £2,464 being £84 (3.5%) more than the national average of £2,380.
- 17 In addition, analysis of specialist schools in the sample shows that:
 - for specialist schools inspected in 2000 the average pupil-to-teacher ratio and the average contact ratio were close to the national figures;
 - at both Key Stages 3 and 4, average group sizes were higher than the national figures, with these averages being skewed upwards by larger group sizes in arts and in sports colleges;
 - the average length of the taught week in arts colleges was broadly the same as in all other schools, but significantly longer in technology, language and sports colleges.
- The arts and sports colleges visited had been operating for a shorter time than most of the technology and language colleges and were therefore inspected at an earlier stage in their development.

Admissions

Almost all (95%) of the schools visited had an increase in their Year 7 intake each year since designation as a specialist school. Over 40% were oversubscribed. As intakes expanded, increased numbers of pupils often came from areas outside the school's regular catchment.

- It is difficult to distinguish the contribution of specialist school status to the schools' increased popularity. The main reasons given by headteachers and other staff for the increased popularity of schools were their existing good reputation, ethos and examination performance. About one-third of headteachers believed that specialist school designation had contributed significantly. Factors such as the positive image of the specialism, increased access to ICT and greater curricular opportunities at Key Stage 4 and post-16 were included by parents and pupils in the reasons for their preference.
- Only two of the schools visited were using the opportunity under the Schools Standards and Framework Act 1998 to select 10% of their intake by aptitude for a particular subject specialism; both used tests of performance in the subjects concerned and the recommendations of the primary schools. The two grammar schools used standardised intelligence tests and other information to select for general ability.

How good are standards?

- This section analyses the examination results of the 327 specialist schools operating at or before September 1998.
- Taken overall, the technology, language and arts colleges operating at or before September 1998 performed better than national averages in relation to the GCSE average points scores gained in each year of their operation (1995–2000). The performance of sports colleges as a group was below the national averages in each year. The rate of improvement at GCSE for specialist schools overall has been slightly greater than the national trend.⁵
- Based on the proportion of pupils gaining five or more A*-C grades, attainment in the GCSE examinations was significantly higher in 2000 in the technology, language and arts colleges in the survey than in maintained secondary schools nationally. In sports colleges, the proportion was below. Based on the proportion of pupils gaining five or more A*-G grades, attainment was higher in each specialist type compared to maintained schools, except in sports colleges, where it was about the same.
- In all types of school the relative performance of boys and girls was similar to the national picture, with girls out-performing boys by a significant margin.

Table 1. GCSE/GNVQ performance in 2000; all specialist schools

| | | pupils with 5+ A*-C | pupils with 5+ A*-G | pupils with 1+ A*-G |
|----------------|----------------|---------------------|---------------------|---------------------|
| type of school | average points | % | % | % |
| Arts | 40.2 | 48.5 | 91.7 | 97.1 |
| Language | 46.3 | 63.5 | 95.1 | 97.6 |
| Sports | 36.9 | 45.0 | 90.4 | 95.6 |
| Technology | 42.0 | 54.7 | 92.9 | 96.8 |
| National | 38.4 | 47.4 | 90.6 | 95.6 |

Note. Based on the performance of 15-year-old pupils on roll in September 1999.

Table 2. GCSE/GNVQ performance since 1995; all specialist schools: total average points score

| type of school | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | trend 1995-2000 |
|----------------|------|------|------|------|------|------|--------------------|
| Arts | - | - | - | 37.4 | 39.2 | 40.2 | 1.37 |
| Language | - | 42.4 | 42.9 | 44.2 | 45.3 | 46.3 | 1.01 |
| Sports | - | - | _ | 34.8 | 35.5 | 36.9 | 1.07 |
| Technology | 37.4 | 37.6 | 38.7 | 39.6 | 41.1 | 42.0 | 0.99 |
| National | 34.6 | 35.0 | 35.5 | 36.8 | 38 | 38.4 | 0.84 |

The numbers of arts and sports colleges among the specialist schools operating on or before September 1998 were small, at 17 arts colleges and 26 sports colleges, and the data on them needs to be treated with caution.

⁶ The trend is based on linear regression; the larger the number, the faster the rate of increase.

However, overall statistics do not provide a picture of attainment in the subjects which make up the various specialisms, nor their contribution to the rising trend of standards in specialist schools. One of the main objectives of specialist schools is, of course, to improve examination attainment in these specialist subjects.

Table 3. GCSE 1997-2000; percentage achieving A*-C grades in specialist schools

| type of | | | | | |
|------------|--------------------------|---------|---------|---------|---------|
| school | GCSE subject | 1997 | 1998 | 1999 | 2000 |
| Arts | Art and Design | - | 65 (58) | 67 (61) | 69 (62) |
| | Drama | - | 66 (67) | 66 (67) | 69 (68) |
| | Music | _ | 63 (64) | 58 (66) | 56 (66) |
| Languages | French | 58 (44) | 58 (42) | 63 (44) | 65 (45) |
| | German | 57 (50) | 62 (50) | 64 (51) | 63 (51) |
| | Spanish | 61 (44) | 62 (43) | 63 (46) | 58 (47) |
| | Other European languages | 57 (50) | 62 (50) | 64 (51) | 63 (51) |
| Sports | PE/Sport | - | 50 (49) | 54 (49) | 50 (51) |
| Technology | Design and Technology | 51 (45) | 53 (47) | 55 (49) | 57 (50) |
| | Mathematics | 47 (44) | 49 (45) | 52 (46) | 54 (48) |
| | Science | 53 (47) | 53 (48) | 53 (48) | 54 (49) |

Note. The figures are derived from unvalidated pupil-level data. The figures in brackets are for other maintained secondary schools. In order to simplify the analysis, results in different subject group syllabuses have been aggregated.

- Table 3 shows that in GCSE examinations taken in 2000, pupils who took the specialist subjects in technology and language colleges achieved higher percentages of grades A*-C than the national averages for these subjects. In arts colleges higher percentages were also achieved in all specialist subjects except music. In sports colleges the percentages were slightly below the national.
- Between 1997 and 2000, the proportion of pupils gaining A*-C grades in each of the specialist subjects in **technology colleges** was higher than maintained schools nationally and the trend of improvement was equal to or better than the national picture over this period.
- In language colleges GCSE attainment in French, German and Spanish was better than national averages. The trend of improvement in these and other European languages (that is, all other European MFL taken together) was better than the national picture, except in Spanish.
- The position in arts colleges overall was more variable. Higher percentages of pupils have gained A*-C grades in art than nationally since 1998. The percentages of pupils achieving this level in drama and music have been below the national figures, except in drama in 2000. The trend of improvement was in line with the national in art, above it in drama, and showed a decline in music.
- In sports colleges, the percentage of A*-C grades in GCSE physical education and sport was higher than the national average in 1998 and 1999. The trend of improvement was lower than the national rate.

Annex B shows that in GCSE examinations in 2000 the combined average points score for each pupil for specialist subjects was higher in technology, language, arts and sports colleges than the average for all other maintained secondary schools. The relative contribution of specialist subjects to the overall points score was in line with or above that for all other maintained secondary schools in each of the specialist areas. It was significantly higher in language and arts subjects.

Features of high attainment

As would be expected, the features of high attainment in the schools visited were broadly the same as in non-specialist schools where pupils do well in the subjects concerned. However, some features were particularly prominent. They are illustrated below for the different subjects.

Technology colleges

design and technology

- pupils are discriminating in their selection and use of information sources to support design work;
- design work is imaginative and based on a sound understanding of constraints and needs;
- effective use is made of a variety of design software packages and other sources of reference;
- knowledge, understanding and skills in control technology, electronics, food and textiles are well developed.

science

- pupils use well planned investigative approaches to scientific enquiry and are skilled in devising investigations, making predictions, hypothesising, and isolating key variables.
- they can work well quantitatively, make accurate observations and record them clearly;
- effective use is made of ICT resources for simulations, data capture, and analysis.

mathematics

- pupils can develop their own ways of solving increasingly complex problems and can use a wide range of mathematical techniques;
- their representation and interpretation of numeric, spatial and algebraic information are good;
- they are able to work out simple calculations accurately in their heads because of an emphasis on mental arithmetic in both key stages;
- they are able to apply the mathematics they have learned in both familiar and unfamiliar situations, for example in design and technology, and science.

Language colleges

- pupils listen to and read the foreign language attentively and use it as much as they can;
- they can imitate closely the models of pronunciation provided by the teacher and other sources;
- they learn quickly how written forms correspond to sounds in order to maintain accuracy as they rapidly extend their vocabulary;
- they master basic grammar quickly and, in particular, they learn how to use the language to express time in its verbs, what requirements it has for number and gender agreement and when to use pronouns;
- by the end of Key Stage 4, pupils can engage in unrehearsed simple conversations about personal matters, cope with the demands of everyday life and use appropriate language with sufficient accuracy so that messages can be easily and precisely understood;
- · when reading or listening, they can cope with a wider range of more complex texts;
- those pursuing their language studies to an advanced level are able to read and use the foreign language well beyond the classroom and acquire the vocabulary and more sophisticated structures necessary to discuss issues.

Arts colleges

- in art and design, pupils manipulate and exploit the characteristics of materials to develop their own ideas and views and use reference sources to research the work of artists, exploring ideas and evaluating visual and other information critically;
- in dance, pupils develop a technical vocabulary and work well in a disciplined way, individually, in pairs or as a whole group;
- in drama, pupils take part in extended role-play with conviction, perform with confidence and are able to express opinions about how the drama should develop;
- in music, pupils take part in and sustain performances as a whole class, demonstrating impressive teamwork, concentration and enjoyment, using vocal skills, keyboards and a range of drums and percussion, using instruments sensibly and working with purpose in small groups when composing;
- in media studies, pupils respond well when given specific purposes for their work, such as a piece of animation to be used as a revision tool in GCSE English, or when working with professional artists and performers.

Sports colleges

- in games lessons, pupils are able to apply techniques to the game situation with consistency, accuracy and precision;
- they understand the principles of strategy and tactics, are able to make informed judgements about their own and others' performance and can use these judgements to plan ways to improve performance;

• in gymnastics, pupils are able to compose complex sequences of movement and to select and combine techniques and ideas in relation to the demands of the activity.

Action to raise attainment in the specialist subjects

- If the features of high attainment in the specialist subjects are broadly similar to those found in those subjects elsewhere, there is also much common ground with other schools in the approaches used to raise attainment. What marks out the more successful specialist schools is often the combination of the approaches used and the consistency and intensity with which they are applied.
- Key elements of the approaches which have a clear impact on attainment in the schools visited are:
 - building on what has been achieved in Key Stage 2 to establish a secure knowledge and skills base in Key Stage 3;
 - using refined procedures for assessment and monitoring, linked to targetsetting for individual pupils;
 - reinforcing key communication and numeracy skills;
 - providing pupils with a wide range of up-to-date ICT resources;
 - deliberate and sustained teaching of study skills, revision and examination techniques;
 - · setting coursework deadlines and intermediate milestones;
 - mentoring pupils who need help to maintain their focus on work and organising catch-up sessions for pupils who fall behind;
 - taking pupils to lectures, exhibitions and other events and venues and arranging work with professionals to unlock interest;
 - encouraging pupils to compete in regional and national competitions and using other enrichment activities, particularly to extend gifted and talented pupils.

Attitudes to learning

- In most of the schools visited pupils recognised the advantages that attending a specialist school provides and responded positively to the challenges set. Their pride in the school, general enthusiasm for learning and willingness to get the most out of these opportunities came over strongly.
- The pupils interviewed were generally aware of and valued the more obvious benefits that specialist school designation provided for them, including extra learning resources, good quality facilities, provision of a wider range of course options in Key Stage 4 and post-16, and better access to up-to-date ICT resources.

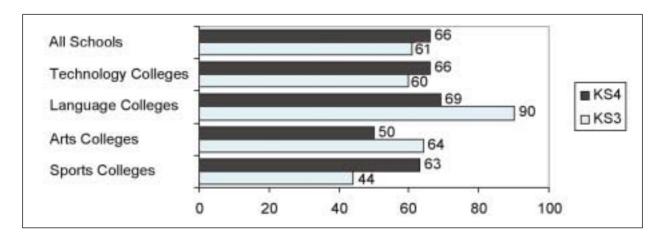
- Pupils used equipment carefully. They were usually very keen to use ICT in their learning. In many cases pupils who had experienced problems with presentation, particularly handwriting, found ICT facilities helpful.
- A consistent feature in the more successful schools was the readiness with which pupils were willing to tackle new and often difficult challenges, to achieve higher levels of performance through persistence and practice, to use their initiative and to work on their own on open-ended projects and investigations. Access to a wider range of learning resources frequently stimulated curiosity and enterprise.
- 40 Pupils worked well in groups and enjoyed taking an active role in team work such as industry days and music or drama performances. As team members they wanted to give of their best and to make an effective contribution to the outcome. They responded positively to opportunities to take part in after-school enrichment activities and catch-up sessions held beyond the normal school day. Pupils spoke very warmly about the opportunity to see the work of and talk to professionals in the specialist field. In several cases this prompted decisions on career pathways.
- Attendance is better than the national mean in two-thirds of the specialist schools covered by this survey. In four-fifths of the schools visited, attendance had risen over the past three years. In another 10% of the schools attendance was already at a good level.

How good is teaching?

Features of good practice

- pupils are taught to plan, to take responsibility for their work and to evaluate it;
- · teachers encourage pupils to excel in areas of particular interest and talent;
- regular assessment and individual target-setting are used to keep pupils on track;
- literacy skills are consistently honed alongside the use of specialist language;
- teachers exploit the full potential of ICT resources;
- subject boundaries are crossed to broaden pupils' understanding;
- enterprise and initiative are encouraged;
- industrial and commercial practices are incorporated in teaching programmes;
- professionals, such as artists, engineers, scientists and sports coaches, are used to support the teaching.
- Specialist schools are expected to place strong emphasis on improving teaching and learning to achieve the objectives of the programme and the schools' own targets.
- Chart 1 gives the percentage of good or very good teaching in the specialist subjects observed in the schools visited compared to the average for all maintained secondary schools inspected in 1999/2000. The overall profile of teaching is broadly in line with the national picture.
- There was variation across the specialisms in the percentage of good or very good teaching observed in the schools visited. In technology and language colleges it was in line with or above the national average in both key stages. In language colleges it was much higher than the national average in Key Stage 3.

Chart 1. Percentage of teaching in specialist subjects judged good or better



The number of lessons observed in arts and sports colleges does not allow for a reliable comparison with the quality of teaching in the specialist subjects in other schools.

Characteristics of good and very good teaching

- Good and very good teaching in the specialist schools has the characteristics seen elsewhere, but some particular features contributing to the effectiveness of the schools were notable in the visits.
- In technology colleges, the teaching of design and technology used carefully focused practical tasks to develop skills and extend pupils' knowledge. Teachers modelled concepts effectively to develop design thinking. In the majority of schools pupils had good access to a number of powerful computer-aided design and manufacture (CAD/CAM) packages. There was also effective use of the world of industrial design, with good use, for example, of the Neighbourhood Engineers scheme to involve consultants with GCSE projects in electronics.
- In science, there was coherence in the cycle of activity (planning, carrying out, analysing and evaluating) when pupils were involved in practical investigations. Pupils were encouraged to read widely about science and to consider its environmental and social impact. Teachers paid particular attention to developing pupils' skills in handling materials and apparatus well and safely, and to their ability to design experiments and investigations to test scientific ideas. Good use was made of ICT for data capture and analysis and teachers used models and analogies to promote understanding.
- In mathematics, examples of good and very good teaching frequently linked the aspects being taught to a practical application. There was a clear emphasis on the need for pupils to be agile with numbers and their mental recall was regularly honed and tested. In many good lessons pupils were asked to explain the strategy they used to solve a problem. Much attention was given to maintaining high standards of presentation and logical working sequences.
- The key feature in language colleges was the more consistent application of the principles of effective foreign language teaching methodology than is generally found in other schools. A particular strength was the very positive attitude to learning languages and cultural awareness promoted by teachers. Nearly all lessons were conducted almost entirely in the target language. Group, pair and individual work was successful because it was used in combination with well-structured teacher inputs and support, often by native-speaking language assistants. Grammar was carefully taught and used as a tool for improving the communicative use of the spoken language together with accurate writing. Correct pronunciation and intonation were stressed.
- In arts colleges, professional artists were frequently used, either as residents periodically or for blocks of time built into the programme. Older pupils in particular reported the positive impact of working with professional dancers, for example, and of the detailed insight they gave into further courses and careers

in dance. One school had used a professional opera company to develop some of its work and the support of the teacher and singers had a profound impact on pupils. Close monitoring and support improved motivation and attendance, especially on the part of boys.

- Where good or very good teaching was observed in **sports colleges**, teachers and specialist coaches were particularly good at diagnosing faults in pupils' performance and offering corrective feedback. Effective teaching in games enabled pupils to consolidate and refine their practical and analytical skills. Small team warm-up sessions and opportunities to plan tactics were also regular features. Pupils worked in the same team over several weeks ensuring that they all experienced different roles and responsibilities. Non-participants were involved in officiating.
- In athletics, best practice provided pupils with well-structured opportunities to develop their understanding, for example, of the principles of throwing. A variety of equipment allowed pupils to practise techniques, and as they gained confidence the teacher refined individual tasks to link more closely with events such as shot-put, javelin and discus. In gymnastics, the most effective teaching focused on developing control and tension in movement with good opportunities for pupils to apply movements on to different pieces of apparatus before devising more complex sequences.

How is the curriculum different?

Features of good practice

- extending the range of accredited courses offered in specialist subjects for all pupils;
- using flexible timetable arrangements to provide enrichment activities in and beyond normal school time:
- · developing and extending pupils' use of ICT;
- involvement in national competitions and initiatives;
- · using other professionals to support learning;
- · building partnerships with business and industry.
- Specialist schools are expected to place an emphasis on their chosen specialism in order to establish a distinct identity. They are encouraged, while maintaining curricular breadth and balance, to try out new ways of delivering the curriculum in each stage, including post-16, and to enrich pupils' experiences in the specialism.
- The challenge of creating more opportunities to study a wider range of specialist courses has been met in many different, and sometimes imaginative, ways. All schools had offered some enrichment activities to broaden and deepen pupils' experiences and to provide opportunities for them to explore areas and concepts beyond normal study. However, some schools had organised this more effectively than others. The main weaknesses were an absence of a clear framework of objectives and a lack of coherence in the planning and organisation of enrichment activities such that some groups of pupils were missing out on opportunities.
- The use made of links with industry, businesses and other professionals varied widely among the schools; there were some very good examples.
- 57 There were no cases where the emphasis on specialist subjects had seriously distorted the balance of the curriculum. Provision for gifted and talented pupils was good in the great majority of schools visited.

Technology colleges

In just over half of the schools visited the specialist subjects were benefiting from additional curriculum time. These were relatively small adjustments to accommodate additional courses being offered or the provision of more discrete ICT teaching. Several schools had extended the length of one day each week to allow pupils to study a wider range of courses leading to GCSE or a General National Vocational Qualification (GNVQ). Sometimes this facilitated early GCSE examination entry in Year 10. Typically, in mathematics, high-attaining pupils started their GCSE course at the end of Year 9, taking the examination in Year 10. In Year 11 these pupils frequently followed a one-year GCSE course in statistics.

In some technology colleges, after-school activities and clubs in the specialist subjects were part of a regular programme for pupils in Key Stage 4. This opportunity allowed pupils to work at a greater depth and provided additional access to practical facilities, specialist staff and ICT resources. Some schools had introduced masterclasses or GCSE catch-up sessions on Saturday mornings.

Selly Park Technology College for Girls, Birmingham, suspends the timetable periodically in Year 9, Year 10 and Year 11 for 'Super Learning Days'. Pupils are able to concentrate on particular aspects of specialist subjects for extended periods of time. Activities focus on projects and GCSE coursework by providing access to specialist staff and facilities, helping girls to plan and organise more effectively and to develop revision techniques. The days are part of a wider programme of activities aimed at raising standards.

- The great majority of pupils in the technology colleges visited followed a GCSE double-award science course or three separate sciences and a full GCSE course in design and technology or equivalent GNVQ. An increasing number of schools are now entering all pupils for an accredited course in ICT by the end of Key Stage 4, and sometimes at the end of Key Stage 3. There has been a significant rise in the number of technology colleges offering vocational courses in related specialisms at Key Stage 4 and post-16.
- Many technology colleges provided a good range of extra-curricular activities in the specialist subjects. They ranged from regular optional access to facilities and staff at lunchtime and after school to carefully planned and targeted occasional activities.

Chalvedon School and Sixth Form College, Basildon, has introduced Saturday schools for Year 11 in the spring term to help pupils complete coursework assignments and for revision. Pupils engage in a considerable number of extra-curricular activities in the specialist subjects before and after school. These provide support study for all abilities including those on early entry to examinations, and those on accelerated learning programmes. The science club, for example, focuses on entry for the Creativity in Science and Technology (CREST) awards. The programme includes classes for local primary schools as well as Key Stage 3 and Key Stage 4 activities. The school provides good access to ICT facilities for pupils and parents who do not have computers at home.

Nearly three-quarters of the technology colleges were providing good examples of technological enrichment activities. These were often part of subject study or a day of technological activity. In addition, there were several very good examples where schools regularly used the ideas and support from outside agencies to provide opportunities for pupils to develop enterprise and to work in teams on technologically related problems. These included the Neighbourhood Engineers scheme, the Engineering Education Scheme for sixth-formers

studying for General Certificate of Education (GCE) Advanced level (A level) in mathematics and science, Young Investigators' clubs, conservation projects in the community and the UK Mathematics Challenge.

At Monks' Dyke Technology College, Louth, all Year 9 pupils are involved in a series of industry design challenges specified and sponsored by a different industry each year: for example British Airways in 1998/99 and Masterfood services in 1999/2000. Pupils worked in teams. Initial planning time was provided from personal, social and health education (PSHE) lessons in the run-up to several full days of activity in June and July after Key Stage 3 tests. The teams had to market their designs and make a presentation to a panel of judges from local industries. The quality of the designing and the products seen was very high.

Archbishop Temple School, Preston, is one of several technology colleges that have taken part in the Euro Collaborator Project developed in conjunction with BAe Systems, a major sponsor. The project was devised to show how industry works collaboratively on technological innovation and design. Pupils in Year 10 and Year 11 designed and produced the model of the wing for a new double-deck aircraft design using CAD software and computerised machine tools. This work involved each specialist area in studies of aerodynamics, forces, structures and mechanics.

At Jeff Joseph Sale Moor Technology College, Trafford, Key Stage 3 enrichment activities are a well-established part of the curriculum and are shared by specialist subjects. In each year all pupils work on a specific problem posed by a local company. For example, engineers from Mott Macdonald worked with the school on a problem to 'bridge a gap'; in Year 8 a supermarket chain supported a project entitles 'Food for Thought', and in Year 9 the Ford Motor Company supported a project on movement. In addition, all Year 9 pupils have a residential visit to the Centre for Alternative Technology in Wales.

Language colleges

All the language colleges visited had significantly enhanced MFL provision compared with the position in most maintained secondary schools. The number and variety of languages taught had increased. German and Spanish were taught in all language colleges and usually had equal status with French as first foreign languages. Some European languages that are rarely taught in comprehensive schools, such as Italian and Russian, were offered in most language colleges, often to GCSE and A level. Most of the language colleges had succeeded in introducing a non-European language, for example Japanese or Mandarin Chinese. In some schools, these languages were enjoying the same status as other second languages.

At **Dartford Grammar School**, **Kent**, boys learn French, German or Spanish in Year 7. In Year 8, they choose one of these, or Japanese or Latin, as their second language. All these are offered in Key Stage 4, where the Latin course also includes some Italian. There are opportunities also to learn Mandarin Chinese, Bengali and Panjabi within or beyond the normal curriculum.

At the **Anglo European School**, **Ingatestone**, all pupils learn French and German from Year 7. In Year 9, nearly 40% of pupils begin a third language, Spanish, Russian or Japanese. All these are taught to GCSE in Key Stage 4, where all pupils must take a full GCSE in at least two languages. Italian becomes available in sixth form, where all pupils must continue foreign language study (many as part of the International Baccalaureate) and the school is continuously adding to the list of languages which pupils may study at some stage of their secondary career.

- In most of the language colleges, the time allocated to MFL had increased. Often pupils had more than the typical 150 minutes a week for their first language, at least in the early stages. Time allocations for the second language were also usually more generous than in other schools, although few language colleges gave the same time to the second as to the first language in Key Stage 3.
- In all the language colleges, individual pupils were required, or have opportunities, to learn more foreign languages, typically three, during their school career. Many taught two languages to all pupils throughout Key Stage 3 or from Year 8 or 9. In some, pupils could start a third language in Year 9. All schools encouraged, and some required, every pupil to continue learning at least two languages in Key Stage 4. In all language colleges with sixth forms, pupils must include foreign language study, either as a continuation of a language already begun or by taking a course in a new language.
- Many of the language colleges had introduced an element of bilingual learning where at some stage pupils study another subject, often history or geography, wholly or partly through the medium of another language. Apart from the other benefits this may bring, pupils' exposure to the foreign language, used for a practical purpose, was greatly increased.
- There had been a marked increase in extra-curricular and other special provision linked to MFL. As well as offering opportunities to learn new languages outside normal school hours, most language colleges had lively foreign language clubs. Many organised special days, even weeks, whose focus was on one or more of the languages taught and/or the countries in which they are spoken. Sometimes these periods provided the opportunity for pupils to 'taste' a third or fourth language.

One such event organised at Stourport-on-Severn High School Language College, Worcestershire, is the Year 10 Japanese week. A wide range of activities is provided, introducing pupils to aspects of Japanese language, life and culture, including food, martial arts, poetry and drama. The week involves many of the teaching staff as well as a number of Japanese visitors to the school.

- The increased presence in language colleges of native speakers, including more foreign language assistants, was a major factor in enabling such events to be mounted. Traditional correspondence between English pupils and those in other countries had been rekindled by electronic mail and occasionally video links. Many schools tried to ensure that every pupil takes part in one visit to another European country and encouraged older pupils to explore opportunities for work experience abroad.
- Where language colleges succeeded in providing for all, or virtually all pupils to take a full GCSE course in two languages within normal curriculum time, the key factor was usually that they have a taught week which is longer than the minimum recommended or have a more flexible timetable.

Arts colleges

In all the schools visited there were aspects of the curriculum that had been enhanced, adapted or radically changed. All had a stronger focus on the arts and this was starting to permeate other curriculum areas where schools were considering issues of creativity across the curriculum. Some had extended the amount of time for the arts at Key Stage 3 and most had introduced an arts entitlement at Key Stage 4.

A significant change in the curriculum at **Stantonbury Campus**, **Milton Keynes**, with 2,680 pupils on roll, was a move from combined expressive arts to discrete arts subjects. Now, all pupils take GCSE drama (433 pupils) and another arts subject at Key Stage 4. This means that all of the arts subjects have large entries for GCSE.

- Other schools had designed the curriculum in such a way that, should they wish, pupils can take additional GCSEs in the arts after school. Some ran one-year 'fast track' courses, while some ran A-level art classes for adults during the school day. More schools were offering GNVQ course at foundation and intermediate levels in addition to GCSE. Overall, more girls than boys were opting for out-of-hours GCSE arts courses. In half of the schools visited, additional time had been allocated to the arts at Key Stage 3.
- All schools were using professional artists-in-residence. These were having a significant effect on pupils' attainment and motivation, especially where there was a good match of artists to the needs of the subject and their input was well targeted. Some schools dissolved the timetable for a week during the summer months for arts activities. Pupils enjoyed the opportunity to work intensively and without distractions on a range of projects during these weeks.
- All schools also ran a wide variety of enrichment activities after school and many during the school holidays. These activities varied considerably and included: school bands and orchestras; choirs; theatre workshops; school productions; community arts events; trips to galleries, shows, concerts, ballets and musicals; soul bands; samba bands; boys' dance groups; barbershop groups; and music

technology clubs. Overall, more girls than boys attended after-school activities, many were involved in more than one activity during the week.

Parkside Community College, Cambridge, works with the local cable television company. Key Stage 4 pupils operated in small groups to shoot and edit a programme about their interests that was broadcast on a weekly basis to the community. Examples included a programme about horses and BMX bike riding. Pupils saw a purpose for this type of work as it had a clearly defined end-product.

74 Some schools had become involved with national initiatives such as 'Rock Challenge', a competition opportunity designed to bring the arts together in a high-profile regional and national event. Most schools chose to create a dancedrama with music and costume. The event was successful in attracting large numbers of pupils who wanted to become involved in the technical side of the performance such as sound and lighting. Local media and parents were very involved in supporting their children at the regional and national finals and were very positive about what the arts were doing for them.

Sports colleges

In the majority of sports colleges visited, physical education had benefited from additional time with most securing 10% or more of the weekly timetable. The time enabled schools to offer a more broad and balanced physical education and sports curriculum beyond the national curriculum minimum requirement. The schools had made good use of the increased time to develop activity areas beyond games. In addition, some had extended the length of units of work to enhance the continuity and increase the depth of pupils' learning.

Penryn College has used its location close to the sea and countryside to develop challenging curricular opportunities in outdoor and adventurous activities. Pupils benefit from a wide range of team activities, including sailing for all and a 'trailblazer' scheme for low-attaining and behaviourally challenging pupils, as well as residential experiences for all pupils in Years 7 and 8. Pupils develop team spirit and the skills of group work. Linking the programme to Key Skills means that pupils are becoming self reliant and leaders are emerging. Involvement is having a beneficial effect in the classroom. Pupils are encouraged to join local clubs. Accreditation is gained in a range of activities.

Sports colleges had made other significant changes to their curriculum for physical education. Some had looked more closely at the needs of pupils of different ability and gender and had adapted the curriculum accordingly. More than half had moved towards single-sex teaching groups and reduced the time dedicated to outdoor team games. This had led to an increase of indoor activities such as aerobics, gymnastics, dance, indoor games, health and fitness, with a significantly beneficial effect on girls' attitudes, standards of participation and performance.

77 Several of the sports colleges were involved in what has become known as the 'Nike Project'. This is an action-based research programme into attitudes towards participation in physical education. Many schools had focused on specific groups of girls who were disillusioned with physical education.

As a result of the Nike Project, both Ivybridge Sports and Community College and South Dartmoor Community College, Ashburton, conducted their own research that led to a variety of approaches to encouraging participation. These included provision of more indoor alternative recreational activities such as aerobics, weight-training, fitness, badminton, athletics, volleyball and access to accredited courses such as the Junior Sports Leader Award (JSLA). Some classes were grouped according to ability. Other steps included organising single-sex teaching groups, promoting more positive images of women in sport and changes to kit requirements.

- At Key Stage 4 some schools had integrated time for examination courses with core physical education so that all pupils can follow either a GCSE short or full course or an alternative accredited course. Those with a sixth form had increased opportunities for pupils to study for an A level in sports studies or a GNVQ in Leisure and Tourism.
- Sports colleges had adopted a number of additional ways to enhance provision. These include linking sport studies with the science department and creating a partnership with a higher education institution, allowing pupils to study to a greater depth with more practical involvement and more extensive use of ICT.
- Recognising that not all pupils are enthusiastic performers, an increasing number of sports colleges were using core curriculum time to offer the Junior Sports Leader Award to low-attaining and disaffected pupils, giving them good opportunities to develop their inter-personal and leadership skills. Some schools were also establishing more appropriate provision for the full spectrum of special educational needs. They used performance data to design individual programmes that include additional specialist lessons and increased opportunities for attendance at specialist coaching sessions in local or regional sports clubs.
- In at least a third of the schools visited, talented performers had personal learning mentors with responsibility for monitoring and refining their personal development plans including academic progress. An increasing number of sports colleges were developing more refined élite performers' programmes which ensure that talented pupils receive specialist coaching and achieve very high standards.
- In all sports colleges the quality of extra-curricular provision was a particular strength. Most of them already had rich and varied extra-curricular programmes before designation, but additional funding had allowed them to support these and to add new activities such as trampolining, horse-riding, skiing, orienteering, cycling, golf and canoeing. Participation rates tended to be high.

The schools were working with an increasing range of partners, including specialist sports clubs and local primary schools to extend the opportunities for out-of-hours learning for both their own pupils and young people in the local community. These activities enriched the curriculum and ensured that more pupils had good opportunity to participate. The majority of schools offered additional opportunities for pupils to obtain awards such as those provided under the Duke of Edinburgh's, sports leader and national sports governing body awards.

At **Brookfield High School**, **Knowsley**, the school has organised and run special event weeks, such as on disability awareness, health promotion, girls in sport week, Olympic week and careers in sport. The 'Parents in Sport' scheme attracted ten new adults to work with the school. Improved arrangements for talented pupils also mean that they have greater access to specialist coaching.

Biddick School, Washington, is involved with the DfES masterclass initiative and is running a pilot scheme in two different areas, tennis and generic movement skills. It aims to concentrate on those pupils with early identified ability. There is provision at two local centres. The programme allows progression through the stages of tennis development, that is, short tennis to transitional tennis to the full game of tennis. The generic movement skills masterclass is more complex and aims to consolidate and extend the generic movement skill base, and the knowledge, understanding and attitude of potentially talented children in the community. It focuses on activities that would occur within the national curriculum and allows for greater opportunity to practise and consolidate these skills.

What impact has the extra funding had on provision?

Features of good practice

- spending plans are based on an audit of needs, linked to the school's targets and are prioritised;
- schools draw on other sources of funding to make even better use of the capital grant;
- better levels of learning resources, upgraded ICT and enhanced staffing are helping to raise standards;
- improved facilities help to promote wider community use.
- The initial DfES capital grant must be used to support the work set out in the application for specialist school status. Its main purpose is to allow the school to undertake work and purchase equipment to enhance the school's facilities for specialist subjects.
- This grant has enabled improvements to be made to accommodation and resources in the majority of specialist schools in relation to need. Schools are also given an annual grant in addition to their normal funding to reflect the costs of implementing the targets in their specialist subject development plan. The grant can be used to enhance staffing.
- In the majority of schools visited, HMI judged that spending priorities were about right and that the specialist grants had been used to good effect. OFSTED inspections of those schools inspected over the last two years show that well over four-fifths of them are providing good or very good value for money generally.

Improvements to accommodation and resources

- Schools have used the capital grant in many different ways. For some, where existing specialist facilities had been very poor and not adequate to support the current curriculum, the grant had been a lifeline.
- The enhanced funding had been used in most cases to provide new or completely remodelled accommodation for teaching and learning. In schools that already had adequate provision, the grant had been used to upgrade facilities and redesign existing layouts to make more effective use of existing space. In some, it had been used to extend facilities or to capture redundant spaces for specialist use and ICT provision. Some schools had used the funding to attract and extend the benefits of other grants, for example, National Lottery funding, New Deal for Schools, other building grants and the Standards Fund, to very good effect.
- Where the capital grant had been used well it was evident that schools had carried out a thorough audit of existing accommodation, proposals had been

prioritised to reflect the development plan targets, and major accommodation deficiencies were being addressed. Project timescales were drawn up at an early stage. Typically, a senior manager was designated to manage the building project and tendering arrangements and consultation with the heads of the specialist subjects were open and thorough. Plans to modify room layouts or extend space for specialist subjects matched the proposed curriculum. Projects made better use of existing space within the school; and new or modified layouts were flexible enough to support a variety of activities and their design related closely to the equipment likely to be used in them. Matters relating to building regulations, DfES guidance on school buildings and health and safety requirements had been addressed.

- 90 The benefits of improvements to facilities included:
 - higher levels of interest by pupils in the specialist subjects;
 - greater motivation and effort arising from the new 'high-tech' image and the opportunity to work in bright and attractive environments;
 - access to a wider range of courses and options;
 - higher standards of work overall but particularly in pupils' presentation and levels of accuracy;
 - extended learning provided by a wider range of good quality resources and opportunities.
- In technology colleges, examples of improvements included: modernising science laboratories, clustering and upgrading mathematics rooms; incorporating new provision for teaching systems and control technology, creating ICT learning resources centres which are easily accessible to each of the specialist subjects; and providing computer-aided design and manufacturing suites. Where accommodation was inadequate, or unable to support the proposed targets in the school's development plan most schools used the capital grant for a large building project.
- Well over three-quarters of schools used their grant and sponsorship to upgrade and modernise their facilities in the specialist areas effectively. Some schools supplemented it by using their own funds and there were also a considerable number of high-quality self-help projects. This helped to spread the benefits of funding more widely. The use of the capital grant to build extra rooms and to refurbish old, poor-quality facilities in such cases provided good value for money.

At **Fowey Community College** grant funding has been used to upgrade very poor science provision. All seven laboratories have been enlarged and re-equipped to a good level of provision. The school took the sensible step of using a number of different layouts to provide flexibility for teaching and learning.

At Thomas Alleyne's High School, Uttoxeter, a run-down youth centre has been converted into a technology centre supported by sponsorship from JCB and the DfES grant. This centre now has a CAD/CAM cell, a multi-materials studio and a graphics space and is

connected to the school network. It supports all post-16 courses in design and technology and GNVQ advanced level manufacturing and engineering. A small design company uses part of the space in exchange for some teaching input. Pupils benefit from working with practising designers.

- Three-quarters of technology colleges used the annual grant to bring general resourcing levels in specialist subjects up to a good standard. They purchased sets of textbooks, improved stocks of basic equipment and provided more expensive and specialised equipment to support advanced study. One of the most obvious benefits seen was better access to sources of reference, including CD-ROMs, and practical work equipment. In science, for example, pupils worked on practical investigations in pairs rather than in larger groups. In design and technology, pupils had access to a wider range of industry-standard production equipment, enabling them to produce high-quality products.
- In about four-fifths of the schools visited the spending priorities were well directed and appropriate. Where this was not the case it was usual to find that schools had spent too much of their capital and annual grants on ICT, to the detriment of other subject needs. A small number of technology colleges had not adequately audited basic resourcing needs in the specialist subjects nor linked purchasing within the annual grant to targets. In some lessons observed, pupils were disadvantaged by not having access to the appropriate equipment and time was wasted. This was particularly evident in design and technology.
- All the **language colleges** visited had made effective use of the capital grant to refurbish, upgrade and often reconfigure the layout of teaching areas. In some cases the capital grant had been supplemented by other funds to provide new or substantially remodelled accommodation.
- Some schools started with a poor standard of provision that often consisted of dispersed classrooms shared with other subjects. The majority of schools had used the opportunity to group and cluster all MFL teaching spaces and to provide good and easy access to ICT facilities. Several schools had incorporated audio rooms or language laboratories into the MFL suite. In one school a Linguaphone block of four classrooms was linked with a central ICT area of sufficient size for most full-class use.

At the Bishop Heber Community School, Malpas, a new purpose-built languages centre has been built. This consists of four classrooms each dedicated to a different country, an ICT centre and a number of smaller tutorial rooms. The building has a separate entrance and reception desk. This also serves as a languages information centre for pupils. The separate entrance accentuates the specialist school's community role and gives a professional feel to the activities taking place.

At the Campion School, Bugbrooke, a substantial part of the existing building has been reconfigured and refurbished to create eight specialist rooms around an open 'international centre'. This provides a study area for pupils, storage for resources, an overflow area for classrooms when more space is needed for project work and an ICT suite. The quality of the accommodation enhances the status of the specialism.

- In all the schools, general resourcing levels for MFL, enhanced by the DfES grant and sponsorship, were satisfactory, and in the majority they were good or very good. A minority of schools needed to work towards providing better access to ICT resources. The most significant benefits from preferential funding were the plentiful supply of textbooks and the good levels of basic resources, such as listening and reading equipment, in each classroom. The majority of schools made good use of ICT resources to which they had preferential access.
- In arts colleges the capital grant had been used in all the art forms in various ways to build new or completely refurbish, or relocate and upgrade existing rooms in the schools. Examples included: dance studios with sprung floors; digital music recording studios; fully equipped drama studios; a professional-quality print and copy shop for an art department; and increased numbers of music practice rooms.
- The expansion of accommodation had enabled an arts entitlement in Key Stage 4 to be introduced in many schools, where often additional drama studios, dance studios, art rooms, music rooms or media suites were required. In all cases, the professional quality of the upgraded accommodation and resources was raising pupils' levels of interest and expectation.

Lord Lawson of Beamish Community School, Gateshead, has developed its commercial print and copy shop and has equipped it with computers, large colour-copiers, laminators and other equipment. All the art classrooms have been upgraded and additional resources such as drying-racks, light-boxes, computers, scanners and digital cameras purchased.

Stantonbury Campus, Milton Keynes, and Intake High School and Arts College, Leeds, have developed digital recording studios.

Theale Green Community School, Reading, has built a second drama studio as part of an arts suite to facilitate work across the arts. The music suite has been completely refurbished and a dance studio is being built.

- In many schools a large proportion of the capital and annual grants had been spent on ICT equipment and this had had a noticeable effect on standards and the motivation of pupils. ICT tended to be used more by the examination groups in Key Stage 4 and post-16 than in Key Stage 3.
- All schools had prioritised their spending well and were developing all arts subjects with the aid of the annual grant. Examples of the good use of funding seen included: drying-racks for all art rooms; refurbishment to room annexes; press-beds for all rooms; and additional music instruments and sound systems for dance studios.
- The most obvious benefit of designation in the **sports colleges** visited was the improvement in the quantity and quality of sporting facilities. Each school had its own development priorities focused on extending the range of facilities or refurbishing existing facilities. Over four-fifths of sports colleges had made good

use of their capital grant to meet these priorities and some had used this to attract additional funding from local and national sponsors, for example the Lawn Tennis Association, and from the National Lottery.

The most common uses of the capital grant were the addition of fitness suites and the resurfacing of hard-play areas. Over half had improved their tennis courts in conjunction with the Lawn Tennis Association's links with regional development centres. About a third of physical education departments now have a designated classroom base to support theoretical studies and examination work. One school, set in a rural location, used funding to purchase minibuses for local primary schools to bring pupils to the sports college facilities.

Barking Abbey Comprehensive School, Barking, constructed 12 floodlit tennis/netball courts, six on each school site, to enhance its facilities and then went on to gain Lottery funding for a new leisure centre, incorporating a sports hall, gymnasium, fitness room, ICT suite and classroom. These new high-quality facilities are enhancing community opportunities for participation and providing facilities for over 50 specialist sports clubs as well as a number of partner secondary and primary schools. It has also attracted coaching and in-service training courses, as well as county sporting events and national rallies.

At Ashton-on-Mersey School, Trafford, a gym and dance studio was built, an all-weather cricket pitch was provided and hard-play areas were resurfaced by supplementing the grant with funding from the Lawn Tennis Association and private sources. Facilities are used extensively by the community in the evenings and on Saturday mornings.

ICT resources

- Over three-quarters of the schools had made good or very good use of both grants to upgrade and extend ICT resources in specialist subjects and for whole-school use. Most schools had a rolling programme of gradual improvement and replacement based on a detailed audit and long-term plan for the development of ICT in the school.
- Across the full range of specialist schools visited, the grants had provided such improvements as linking specialist areas to the school network; and providing computers for learning resource centres. Schools had also purchased equipment for specialist subjects, such as integrated learning systems, datalogging equipment, CAD/CAM equipment, digital media editing suites and heart-rate monitors.
- There was much evidence of the contribution which the enhanced availability and use of ICT, within and beyond the school day, can have for pupils' motivation. In addition there were effects on:
 - the expertise and confidence of teachers in the application of ICT to raise standards within specialist subjects;

- pupils' capability and understanding in the use of ICT and the increased numbers gaining accreditation in ICT;
- the quality of presentation, especially in GCSE coursework;
- · links with partner schools and the local community;
- the capacity of specialist schools to share their new expertise and ideas with others.

Staffing and staff development

- Nearly three-quarters of the schools visited said that they were able to recruit good staff more easily than was previously the case because of specialist designation. This included heads of department. The reasons given included better levels of resourcing, especially of ICT, being at the leading edge of subject developments, and explicit commitment by the school to the status of the specialism. Staff were generally keen to stay in specialist schools because of the opportunities to innovate.
- 108 Despite these attractions the remaining quarter of schools visited were experiencing problems recruiting suitably qualified and experienced staff for specialist subjects. Most difficulties related to subjects in technology colleges. Two technology and two arts colleges, all in areas of high housing costs, reported that they had experienced considerable difficulties recruiting good quality staff in specialist subjects.
- Many schools used funding to recruit additional staff as the specialist curriculum expanded. Two-thirds of schools had used the annual grant to reward staff for extra specialist responsibilities, including additional work associated with the community plan. Several schools were timetabling staff flexibly in order to cover work which took place beyond the traditional school day and into work with other local schools and the wider community. This was particularly the case in arts and sports colleges.
- Over three-quarters of schools had increased the number of ancillary staff particularly to support ICT. Good use was made of these extra staff to free teachers to get on with teaching, assessment and curriculum development. However, there was no evidence of schools recruiting more learning support assistants in order to target pupils with learning difficulties in the specialist subjects.
- 111 Fewer than two-thirds of schools had made effective use of the annual grant to extend opportunities for professional development. In good examples clear links with targets were evident and the beneficial impact on teaching and learning could be seen. Effective approaches to professional development included:
 - visits to national conferences and exhibitions and to other specialist schools to learn about and see good practice;

- paired working across specialist subjects within the same school to exchange ideas;
- the use of sponsors to provide management courses;
- industrial placements;
- · links with New Opportunities Fund training in ICT;
- Educational Training Partnerships and other opportunities provided by ICT software suppliers;
- · specific technician training;
- training on GNVQ and key skills.
- Where schools were not capitalising on the full potential of the annual grant to support professional development, the main weaknesses were in the lack of match to objectives for improvement and the lack of dissemination of training and other experiences.

How well is the wider role of specialist schools working?

Features of good practice

- clear communication of the purpose of the community role to others;
- · building on what the school is already providing;
- a social inclusion dimension incorporated into the objectives;
- · consultation with partners on their needs;
- targets stated as educational outcomes;
- · activities that are adequately staffed and resourced.
- Sharing resources, good practice and expertise with a family of local schools and with the wider community is a key element of the role of specialist schools, albeit a relatively new one. In its community development plan each school sets its own targets for achieving this, within the guidance given by the DfES.
- With a few exceptions, the community dimension in the schools visited was the weakest part of their specialist schools' work. The majority of schools had found it difficult to define, develop and manage. Too many schools had not yet forged partnerships with their communities; nor did they understand fully how they could provide learning opportunities for specific groups. There were good examples of support for other schools in about half the technology, language and arts colleges. In the remainder, objectives were vague and lacked a focus on outcomes, including learning outcomes. However, sports colleges had responded well to the challenge and the community role was one of their notable strengths.
- 115 Effective implementation depended on several factors: consulting with schools and community representatives about needs, devising clear objectives, planning and managing the effective delivery of activities and evaluating the impact so that benefits can be replicated. Where implementation resulted in limited benefits, the resourcing and management of the activities were often poor.
- 116 Nearly three-quarters of the specialist schools visited had provided prospective community partners with information to help them understand the objectives of the programme and how they could benefit from involvement. In the majority of cases the specialist schools consulted other local schools and community groups on ways in which support could be provided to meet their needs within the principles set out in DfES guidance.
- 117 Schools had used a variety of ways to communicate their agreed programme of wider community activities. The most usual form of publicity was through the school or community newsletter. Where planning and management were good, a community co-ordinator maintained regular contact with those groups involved in order to monitor how the programme of activities and support was working and whether it was meeting the perceived needs of the client group or partner school.

- 118 Where support was working effectively, partnerships were usually based on previously well-established relationships. The specialist school provided clear information about what might be possible and partner schools understood the specialist school's accountabilities within the programme. Other local community provision was well researched before plans were made and advice and support from a variety of other agencies were sought from, for example, adult education providers, youth services, libraries and the business community.
- In the best practice, objectives included distinct learning outcomes and sometimes reflected an articulate approach to social inclusion. Crucially, the objectives fitted the partner schools' own development planning priorities. Arrangements were made for the partner schools to identify link staff who took on the responsibility to share good practice. Contracts of an informal sort were agreed with the partners to avoid misunderstandings. Where the initiatives were well managed, they were adequately funded, including for the provision of equipment, and time was allowed for staff to plan and deliver the agreed contribution. Where ICT was part of the support, technical help was built in. Finally, there were procedures to monitor and evaluate the quality of the support and the outcome of it.
- Just over half of the technology colleges visited had developed good examples of community support and were able to show clear benefits of their work with partner schools. Good examples included:
 - joint curriculum planning and exchange of good practice, including across the phases;
 - weekly support by the school staff for Key Stage 2 projects in design and technology, ICT, science and mathematics over a defined period;
 - ICT training for partner school staff, particularly in the use of the Internet and control and measurement;
 - access to technical support and advice for, and the loan of, specialist equipment to primary schools;
 - use of the school's specialist facilities by Year 6 pupils for projects and Saturday morning masterclasses;
 - joint Young Engineers' clubs with partner secondary schools; and
 - CAD/CAM lessons for Key Stage 4 pupils at the partner special school.

Hartsdown Technology College, Margate, is providing a teacher and equipment to support the introduction of control technology and robotics to Year 6 pupils in local primary schools. The teacher works in the primary school one afternoon a week alongside the class teacher and a learning support assistant. Pupils have designed and made models of robots and fairground rides using modelling kits and learned how to control these by computer. This project aims to integrate design and technology, science and mathematics.

The Archbishop Blanch CE High School, Liverpool, was supporting a multicultural education project for training classroom assistants. The school was providing a teacher for numeracy and ICT in a 30-week course which was held in Toxteth.

The Middleton Technology School, Rochdale, offers free twilight and evening sessions in ICT. The primary focus is to provide opportunities for improving skills and confidence. The school has avoided using the word 'course' and there are no fixed start and end dates: participants learn at their own speed and in their own time. There is no fear of failure or of missing a week. Some adults are working towards national accreditation. Teachers act as facilitators. Currently over 70 adults attend on a weekly basis.

- In about half of the **language colleges** visited, support for other local schools in the partnership was good and demonstrated several obvious benefits to the pupils involved. Examples of good practice were:
 - MFL teachers working with pupils in the last two years of Key Stage 2 to introduce French or German, in school time or in after-school or weekend classes:
 - devising and agreeing a common scheme of work for the last two years of primary education;
 - support for a local school which requested help to raise the standards of French, involving a programme of working groups, reciprocal visiting and lesson observations;
 - a school with a Japanese 'intern' supporting international weeks at other secondary schools.

The Montgomery High School, Blackpool, is developing its language teaching programme in six partner primary schools, offering lessons in French, German and Japanese to Year 6 pupils. A 'cyber café' has been provided on a weekly basis to support this initiative. In addition, the school organises a study support centre on Saturday mornings staffed by MFL and ICT teachers for its own pupils and staff, also focusing on language learning for adults from the local community. The school deploys its literacy and numeracy co-ordinators for a half day each week in its six partner primary schools, in order to strengthen transition and pedagogy. Teaching and learning in the secondary school is at the heart of the school's Beacon School plans in networking with some partner secondary schools in Blackpool, as well as further afield.

Over three-quarters of the language colleges had developed effective ways of supporting individuals and groups in the wider communities they serve.

Bishop Heber Community School, Malpas, offers adult education classes in the main European languages with opportunities for accreditation at various levels. It has established a linguists' register enabling individuals and local businesses to contact teachers and translators in a wide variety of languages. 'Languages circles' have been formed to help individuals with advanced skills to maintain them. Sixth-formers can also attend these activities.

Goffs School, **Cheshunt**, has provided intensive language courses for Tesco, one of its main sponsors. In addition, it provides adult courses in French, German, Spanish, Italian and Japanese.

- The community dimension of the majority of arts colleges visited had been slow to develop, except where there was a strong tradition of working within the community. In such circumstances specialist school status had provided the school with opportunities to develop partnerships. Some initiatives were already having an impact on standards in partner schools. Examples of good practice included:
 - providing training for local primary and secondary schools where there was none available in the area, for example in Tai Chi, animation techniques, calypso, breakdancing and the conventions of street theatre;
 - establishing a local arts education forum for schools and other organisations to organise programmes for dancers and artists-in-residence;
 - providing space and technical support for joint art exhibitions and festivals;
 - lending musical instruments and equipment to primary schools to support a rock and pop project;
 - working with primary schools to develop schemes of work which incorporate new elements in the arts:
 - helping primary schools to form their own music ensembles.

Stantonbury Campus, Milton Keynes, appointed an artist-in-residence to enrich the curriculum and lead workshops in partner schools. A music teacher works in feeder primary schools for two days a week. Local schools can participate in an annual two-week dance residency at the school or have a theatre-in-education company perform to younger pupils. Technical support is available for their school productions and they can use the purpose built theatre or art gallery on campus. Masterclasses are provided for Year 5 and 6 pupils on campus and the staff provide training to all the partner schools, on such topics as singing in the Key Stage 3 curriculum; improving the use of sound and lighting in school productions, silk-painting and creative dance.

124 There were several good examples of arts colleges which were developing an adult education role

Lord Lawson of Beamish Community Visual Arts College, School, Gateshead, had developed an adult education art class and moved it from its usual evening slot to a whole afternoon session. Some adults are following this course of study to GCE A-level standard as a result of the added stimulus of working alongside sixth-formers.

Headway is a day centre for adults who have head injuries following traffic accidents or brain tumours. Parkside Community College, Cambridge, now invites Headway to perform their annual dramatic production in its school hall. There is good wheelchair access and car parking in this central city school. Pupils from the school provided all the technical support, and operated the lights and video for the performance. The professional feel of the theatre and the atmosphere of the performances had a profound effect on the Headway members and many spoke of how they had grown in confidence during the production.

- The sports colleges visited had responded well to their responsibilities for working with others in the wider community and it has emerged as a strength of their provision. Links between sports clubs, national governing bodies, adult community groups and primary schools were well established in all the schools visited. All were offering support of good quality and in nearly three-quarters the support was very good.
- All sports colleges were judged to be effective in using their community plan to raise standards in the profile of physical education and sport in partner schools. A number of sports colleges were supporting festivals of primary school sport with local and then regional rounds.
- Most of the sports colleges had good systems in place for involving local schools and community groups in the evaluation of initiatives. Two-thirds had clear induction procedures and guidance for monitoring the quality and professional development of coaching staff and adults other than teachers who may come into contact with pupils, including observation of their work with pupils.
- Partner schools, groups and individuals in the wider community were benefiting in a variety of ways, for example through:
 - staff training opportunities, such as team-teaching and specific courses;
 - specialist equipment loan and access to good-quality facilities;
 - provision of venues for national governing bodies to conduct courses;
 - increased access to specialist expertise;
 - access to the Junior Leaders Sports Award (JSLA);
 - extra-curricular opportunities after school at weekends and during the holidays;
 - joint planning and preparation of teaching materials.

At **Ivybridge Sports and Community College** TOPS Link Festivals have involved 14 local primary schools and approximately 80 children in a day's programme of specialist teaching using high-quality facilities. Activities involved various aspects of fitness linked with numeracy and literacy through team work and individual activity. Pupils in Year 11 following the JSLA course were also actively involved in leading and working with various groups of children.

At South Dartmoor Community College a festival is held each year in collaboration with partner primary schools. This focuses on the aesthetic areas of the physical education curriculum - gymnastics and dance - and aims to encourage success and enjoyment throughout physical education. Good practice is shared across the membership of the area sports college consortium. Teachers are allocated to a seminar group and given opportunities to observe and discuss teaching and quality performance. This helps to develop a more systematic monitoring of pupils' progress in physical education, particularly at Key Stage 2.

- Liaison with a wide range of community groups was more complex and most schools adopted individual and informal arrangements that involved the designated community co-ordinators working with specific groups such as local clubs or sports development units. In some areas, such as Devon and Cornwall, sports colleges were working together as a consortium to ensure good coverage of sports provision and avoid unnecessary duplication.
- 130 Many community co-ordinators also liaised individually with national organisations such as the Youth Sport Trust, the Central Council for Physical Recreation, the Lawn Tennis Association, the Rugby Football Union and the English Basketball Association and, where appropriate, had involved organisations in the planning of the initiative. For example, the Lawn Tennis Association consulted schools about developing facilities and support for talented players leaving school.

Weaknesses in community programmes

- In all the types of specialist schools where the community support programme was weak, the following deficiencies were frequently noted:
 - the overall programme did not extend to any significant degree what the school was already doing;
 - research into what was needed in the local area and negotiation with partners had been superficial and links with other agencies and providers were minimal:
 - the learning objectives were unimaginative and poorly defined, without clear outcome targets;
 - inadequate attention had been given to education and training opportunities for the wider community, especially in socio-economically disadvantaged areas;
 - the implementation was inadequately managed and sometimes poorly staffed or resourced;
 - the programme of support was not sustainable nor was it of a consistent quality;
 - monitoring and evaluation strategies were not well developed and took little account of the views of participants.

How successful are the schools in managing their role?

Features of good practice

- a clear and sustained emphasis on raising standards reflected in action by senior managers and heads of the specialist departments;
- high visibility of the specialist status and clear communication of the purposes of the programme;
- incorporation of the specialist school targets into the school development plan, with spending plans linked to targets;
- well-defined, innovative and collective action by specialist departments;
- · successful working partnerships with sponsors and other local organisations;
- effective monitoring and review.
- After designation, specialist schools need to turn aims into practice, meet targets, take up opportunities and maintain the momentum of school improvement. They are expected to demonstrate improved standards by meeting the challenging yet realistic targets they set themselves. Commitment and effective leadership and management are the keys to achieving these targets.
- In schools where the aims of the programme were well integrated with the school's culture, it was usual to find that the school was moving forward quickly. Over four-fifths of the schools visited had generally effective structures and systems for managing the programme overall. However, management by heads of department was judged to be making an effective contribution to meeting the specialist school targets in a smaller proportion: about two-thirds. The main weaknesses in management, whether evident at school or departmental level, were a lack of corporate planning, insufficient focus on improving the quality of teaching, tenuous links between funding allocation and targets and poor monitoring systems.
- The distinctive character of, and pride in, the specialism were clearly visible on entry to over four-fifths of the schools visited. These schools communicated the objectives of the specialist schools programme clearly to visitors, parents, other local schools and businesses, and celebrated many of their achievements in displays. In good examples the specialist school ethos was apparent throughout the school in the work being done.
- The quality of information in the prospectus about the school's specialist designation was very variable. Good documentation clearly explained, among other things: the distinctive characteristics of the school as a specialist school; the range of opportunities available to pupils; how the school would work with and support other schools and groups in the wider community; and details of the extra funding provided and its use.

- Nearly a quarter of the schools visited had not signalled their specialist identity in their prospectus. They had not provided parents or the local community with clear, straightforward information on the school's responsibilities and accountabilities. Some schools gave more prominence to displaying affiliation to the various agencies which had supported their application than to highlighting their designation.
- In the schools with effective structures and systems for managing the programme several features were regularly in evidence. First and foremost, they were well led by a headteacher who nurtured and promoted the initiative, was well informed about its objectives and progress and was a driving force for change. There was usually a steering group involving governors and sponsors with responsibility for setting the direction, making executive decisions and monitoring progress. The specialist school development plan, including the community dimension of it, was integral to whole-school planning and spending plans were closely linked to targets. Clear procedures and timings were established for reporting and review of progress.
- A key staff member, who usually taught in one of the specialist departments, managed the day-to-day work, with his or her responsibility often signalled by enhanced salary and membership of the senior management team. Lines of communication between this manager and other staff were clearly defined and worked well. Meanwhile, subject leaders were encouraged to put forward innovative ideas, to lead work in their field positively and to work with others. Links were made to training through a well-defined approach to professional development.
- About three-quarters of the schools had assimilated their specialist school targets into their school development and subject development planning cycle. The majority of their school development plans already focused on raising attainment and developing the quality of teaching. Effective departmental plans had refined the original application into working documents setting out prioritised action, with more clearly defined strategies for achieving the desired outcomes.

At The Middleton Technology School, Rochdale, which serves a disadvantaged area, the headteacher and senior staff have seized the opportunity of specialist school status to raise expectations, and to promote a technological learning culture in the school. The senior management team has agreed a range of strategies which have proved to be very effective in supporting these priorities. These include: establishing good communication systems within the school and with parents; having clearly defined and agreed standards; supporting good ideas and innovation; establishing the best conditions for learning; underpinning the curriculum with an effective literacy policy; using individual target-setting and a close monitoring programme with pupils; and mentoring those who underachieve or whose attendance is poor; teaching some subjects and years as single-sex groups; setting in every subject; emphasising success and not allowing any pupils to drop out at any time.

- 140 Heads of faculties and departments in the specialist subjects have an essential part to play in raising standards. In about two-thirds of schools visited, their management was judged to be good. It made a significant contribution to curriculum development and to meeting the specialist school targets for provision, take-up and outcomes. This proportion is higher than the proportion of all secondary schools judged to have good or better middle management by OFSTED inspections. There is, nevertheless, a good deal of scope for improvement.
- 141 These were common features of good subject management:
 - specialist subject heads of department fully understood the basis on which they were working, were supported by the senior management team and played an integral part in the cycle of planning and review;
 - they worked as a team and were able to negotiate and agree priorities and strategies for meeting targets;
 - they were party to decisions on the allocation of funding and spending priorities;
 - there was a close match of new resources to targets in the development plans;
 - they were fully involved in setting their specialist departmental targets, which were incorporated within departmental development plans;
 - they were competent users of performance data and could use them in targetsetting and monitoring;
 - their departmental leadership was consultative, set high expectations, encouraged innovation and provided strategic direction;
 - they were active in monitoring the quality of teaching in their departments, and training and time were given for this to happen;
 - there was a regular departmental review system to check how effectively targets were being met;
 - the planning of professional development was based on the evaluation of teaching and aligned with targets;
 - heads of department reported regularly to the governing body, and through it to sponsors, on the progress their departments were making.
- Over four-fifths of schools had developed effective ways of monitoring and evaluating the performance of specialist subjects and progress in meeting targets. Where practice was good, schools had a well-defined and cohesive approach to evaluation; the senior management team carried out departmental reviews (including scrutiny of standardised tests and examination performance, using subject residual data); and heads of department observed teaching on a regular basis and sampled pupils' work periodically. A notable characteristic of

- such schools was their ability to take remedial action quickly if it appeared that targets would not be achieved.
- 143 Few schools had used external agencies to monitor or evaluate their progress in meeting specialist school targets.

Weaknesses in management

- A number of weaknesses in whole-school and departmental management were having a negative impact on progress and achievements. These included:
 - an absence of vision, no clear sense of purpose and poor corporate planning, including inadequate consultation;
 - a lack of commitment demonstrated by the governing body and senior management;
 - feeble statements in the school prospectus about the school's status and its objectives;
 - tenuous links between funding allocation and targets;
 - departmental action plans that do not incorporate specialist school targets;
 - insufficient focus on improving the quality of teaching;
 - inadequate attention to the use of funding to provide enhanced staffing and training; and
 - · weak monitoring and evaluation.

Conclusions

- This survey indicates that taken collectively, the majority of specialist schools are meeting the aims of the programme in large measure and making good use of the advantages it brings.
- 146 In relation to the six aims of the programme:
 - a. good specialist schools are extending the range of opportunities available to pupils. Their curriculum has been broadened and schools are providing a range of enriching experiences beyond normal subject study. Despite this, the balance of the curriculum has been generally maintained;
 - b. teachers in these schools are using a range of effectively managed and sometimes imaginative strategies to raise standards;
 - technology, language and arts colleges are improving attainment at a faster rate than is the case nationally, but, as a group, sports colleges are not yet doing so;
 - d. there is a generally high level of commitment in the schools to creating a distinctive ethos and raising standards and most schools have pride in and celebrate their status;
 - e. schools' approach to their role as a resource for the community support role
 is developing more slowly and with less certainty, but there are good
 examples of activities and sports colleges are well established in this area of
 work;
 - f. most schools are fulfilling the sixth aim by involving businesses and other agencies in the sponsorship arrangements, using industrial placements for pupils and staff and capitalising on the use of other professionals to support various educational activities.
- 147 Many schools taking on specialist status have seen it as a natural step in their development. It has been a catalyst for innovation and in most cases has helped to sustain or accelerate the momentum of whole-school improvement. Teachers have worked hard to meet the challenges and enjoyed the opportunity to improve teaching in their subjects by having the resources to do the job well. The opportunity to explore and capitalise on developments in ICT is supporting these advances. In this and some other respects, many specialist schools are at the leading edge of development.
- All the schools have benefited from the extra resources provided to support curriculum development and teaching, in particular the opportunity to upgrade and modernise facilities. This has usually provided good value for money.

- However, one in five of the schools visited have not made the best of the opportunity: they have not used the status, and the preferential funding that comes with it, to best effect. While that does not necessarily imply that they have not tried to do so, it does mean that resources, for which other schools bid unsuccessfully, have been used ineffectively.
- 150 The main challenges common to specialist schools are now, therefore:
 - to build on the strengths and good practice that exist in the programme as a whole;
 - · to develop approaches to effective teaching and learning;
 - to continue the drive to raise standards, tackle under-achievement and extend opportunities for all pupils maintaining a sharp focus on inclusion;
 - to provide a wider range of well-planned enrichment activities that adds value to all pupils' experience of the statutory curriculum;
 - to explore further, ways of using ICT to support learning; and
 - to develop effective ways of supporting and sharing good practice with local schools and members of the wider community.

Annex A. Schools visited

| School | LEA | Status |
|--|--|---|
| Anglo European School Archbishop Blanch CE High School Archbishop Temple School Ashton-on-Mersey School Barking Abbey Comprehensive School Beaconsfield High School Beauchamp Community College, The Biddick School Bishop Heber Community School Brookfield High School Campion School Campion School Chalvedon School and Sixth Form College Coundon Court School and Community College Dartford Grammar School Fowey Community College Glyn Technology School Graveney School Graveney School Hanson School Hanson School Hartsdown Technology College Hermitage School Intake High School Ivybridge Sports and Community College Jeff Joseph Sale Moor Technology College John Kelly Boys' Technology College Katharine Lady Berkeley's School King Solomon High School Lord Lawson of Beamish Community School Monks' Dyke Technology College Middleton Technology School, The Newquay Tretherras School Northampton School for Boys Parkside Community College Presdales School Selly Park Technology College for Girls Sidney Stringer Community Technology College St Angela's Ursuline Convent School | Essex Liverpool Lancashire Trafford Barking & Dagenham Buckinghamshire Leicestershire Sunderland Cheshire Knowsley Northamptonshire Essex Coventry Kent Cornwall Surrey Wandsworth Hertfordshire Bradford Kent Durham Leeds Devon Trafford Brent Gloucestershire Redbridge Gateshead Lincolnshire Rochdale Cornwall Northamptonshire Cambridgeshire Cambridgeshire Cornwall Hertfordshire Birmingham Coventry Newham | Foundation Voluntary Aided Voluntary Aided Foundation Community Foundation Community Community Community Community Foundation Community Foundation Community Foundation Foundation Foundation Foundation Foundation Foundation Voluntary Aided Voluntary Aided Voluntary Aided Community Foundation Community Community Community Community Community Community Community Community Foundation Community Foundation Community |
| Selly Park Technology College for Girls Sidney Stringer Community Technology College St Angela's Ursuline Convent School | Birmingham Coventry Newham | Community Community Voluntary Aided |
| St Angela's Ursuline Convent School St Bonaventure's School St John the Baptist Catholic Comprehensive School South Dartmoor Community College Stantonbury Campus Stourport-on-Severn High School Language College Thomas Alleyne's High School Theale Green Community School Uppingham Community College | Newham Newham Surrey Devon Milton Keynes Worcestershire Staffordshire West Berkshire Rutland | Voluntary Aided Voluntary Aided Voluntary Aided Community Foundation Community Community Community Foundation |

The Montgomery High School, Blackpool, a community school, is referred to in the report but was not visited in this exercise.

Annex B. GCSE performance

Charts A1–A4 show the average total GCSE points for each pupil achieved in the specialist subjects for each type of college, compared to pupils' achievements in those subject in all other maintained secondary schools, including the other specialist colleges.

Charts B1–B4 give the proportion of pupils' average total GCSE points achieved in the specialist subjects in each type of specialist college, compared with other maintained secondary schools, including the other specialist colleges.

