

Providing for gifted and talented pupils: An evaluation of Excellence in Cities and other grant-funded programmes

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HMI 334



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Introduction

Background

- 1. In 1992 a review by Her Majesty's Inspectors (HMI) of the education of very able children in maintained schools concluded that such pupils 'are often insufficiently challenged by the work they are set'. The review paid tribute to the work of a small number of local education authorities (LEAs) which took a lead in provision for very able pupils and to the work of organisations with specific interest in their education. At that time, the introduction of the national curriculum offered the prospect of help to teachers in identifying high ability and setting challenging expectations for each child.
- 2. A study by Joan Freeman commissioned by OFSTED and published in 1998 analysed research and practice on the identification and education of very able pupils.¹ At about the same time, the House of Commons Education and Employment Committee took evidence to inform its inquiry into provision for very able children. The report of its inquiry, published in 1999, recorded that 'much evidence noted that provision for the highly able was not satisfactory in the majority of English schools'. The committee recorded its dissent from what it described as a commonly held view that they highly able children, can get by on their own, emphasising that they have as much of an entitlement to have their needs addressed as do other children.²
- 3. The committee's conclusions chimed with the view of the then Department for Education and Employment (DfEE)³ that there was a need for a more active national strategy for the education of the very able. Within the context of a broad approach to raising standards, efforts were stepped up to encourage schools, especially in inner-city areas, to identify their very able pupils and to make special provision for them through targeted initiatives.
- 4. A set of four grant-funded programmes masterclasses, summer schools, independent/maintained school partnerships and a strand of the much larger Excellence in Cities initiative have formed part of the national strategy. Their main emphasis has been on pupils of secondary age, and exclusively so in the case of Excellence in Cities up to September 2000.

Educating the Very Able: Current International Research, Joan Freeman, OFSTED, 1998.

² Highly Able Children: Third Report from the Education and Employment Committee 1998-99, HMSO, London, 1999.

Now the Department for Education and Skills (DfES). The earlier title is used in this report where the reference is to action or publications before June 2001.

- 5. The DfEE adopted the phrase 'gifted and talented' to define the pupils with whom the strategy is concerned. 'Gifted' refers to those with high ability or potential in academic subjects and 'talented' to those with high ability or potential in the expressive or creative arts or sport. The phrase was adopted in the OFSTED framework for the inspection of schools from January 2000.⁴ Issues of definition and identification are covered in this report.
- 6. Additional provision for gifted and talented pupils continues to develop. The pilot masterclasses projects have ended, but summer schools continue and the number of independent/maintained school partnerships supported by the DfES has grown. Excellence in Cities is expanding, and there are strands concerned with the gifted and talented in all its new programmes. Guidance on teaching and resources is now available from the Qualifications and Curriculum Authority (QCA). A new Academy for Gifted and Talented Youth will begin work in 2002.

Report

- 7. This report is concerned with the use made by schools of the opportunities presented by the grant-funded programmes. It highlights points for consideration about the nature of the programmes and their relationship to mainstream school provision.
- 8. The report is based on OFSTED inspection of provision made under the four grant-funded programmes. HMI visited the 10 pilot masterclass projects over their two-year life-span; they also visited 31 summer schools in 18 LEAs in summer 2000, and four independent/maintained school partnerships in 2000/01. Special visits were made between summer 2000 and summer 2001 to see work within the gifted and talented strand in a sample of 43 secondary schools in Excellence in Cities areas. Evidence also came from OFSTED inspections between January 2000 and summer 2001 of 67 secondary schools involved in Excellence in Cities.

⁴ The framework for the inspection of schools, OFSTED 2000.

Main findings

Benefits of the grant-funded programmes

- Against a background of general improvement in provision for high-ability pupils, the main effect to date of the grant-funded programmes inspected has been to increase the amount and quality of additional activities, often out of school hours. Pupils have responded well to these activities and have derived benefits from them, although evidence of their sustained impact on attainment is limited.
- While these additional activities have value when well planned and managed, the essential need continues to be that schools examine and improve what they do for their high-ability pupils through the teaching of the mainstream curriculum, as well as through additional activities. The planning of teaching to increase the pace, breadth and depth of learning for high-ability pupils needs to be more deliberate in many schools.
- The Excellence in Cities programme offers a promising basis for this work, provided that a secure approach to its management is established in the schools involved.
- Schools would benefit more generally from greater help on assessment and forms of teaching which support higher achievement at an earlier stage. Exemplification of effective approaches within individual subjects is a clear need.

Excellence in Cities: the gifted and talented strand

- The focus and funding of the Excellence in Cities strand for gifted and talented pupils have had positive effects. There is still much to be done to fulfil the objectives of the programme. It is too early to see sustained impact on attainment in tests and examinations.
- The identification of gifted and talented pupils has presented difficulties for schools. To date, methods of identification have generally been rudimentary and have not yet solved the problem of recognising latent high ability, particularly among pupils who are underachieving generally.

- The development of distinct curriculum programmes for gifted and talented pupils is at an early stage. Most of the early work in schools has consisted of activities to enrich the mainstream curriculum, but these need to be better integrated if they are to have long-term effect. There has been little significant change in the organisation or the teaching of mainstream classes. In general, schools have chosen successful departments to spearhead the development; the task now is to develop better practice across all departments.
- ☐ Management of the Excellence in Cities programme was good in two thirds of the schools visited and satisfactory in most of the others. Three key management issues emerge:
 - the support of senior managers is vital in underpinning the authority of co-ordinators, not all of whom are in senior positions
 - the responsibilities of subject leaders in relation to the initiative need to be clarified
 - monitoring of the benefits of the additional programmes is rarely evident.
- Training has usually been confined to lead and school co-ordinators in the first instance and there is a need for local partnerships to make training available to all teachers, especially with regard to subject-specific work.

Other grant-funded programmes

| □ | Masterclasses, | summer | schools | and | independent/maintained | school |
|----------|-----------------------------|--------------|--------------|--------|-------------------------------|-----------|
| | partnerships hav | e contribu | ted to rais | ing av | vareness of the need to pr | ovide for |
| | pupils of high abi need. | ility and ha | ve given o | pportu | ınities to try out ways of me | eting the |
| | The procedures i | read to ide | antify nunil | e have | heen varied and of variable | a quality |

- The procedures used to identify pupils have been varied and of variable quality. The planning of activities has occasionally been sketchy. Efforts to link different initiatives and relate them to other school improvement work have been limited.
- ☐ The best **masterclasses** were successful in catering for pupils' gifts and talents in specific fields. However, the majority had weaknesses in relation to continuity and progression. Criteria for identification were not always shared between partner schools.
- ☐ Most of the **summer schools** for the gifted and talented pupils visited were successful in fulfilling their immediate aims. The experience was much appreciated by the pupils and had a positive impact on self-esteem and motivation, but the long-term benefits were uncertain.

- The organisation of summer schools was in some cases inadequate and many of those visited were affected by short planning time, by inadequate communication between LEAs and schools, including the identification of pupils, and by inconsistent monitoring. Information about pupils' performance and potential was not always fed back to their home schools.
- A small number of the **independent/maintained school partnerships** have focused specifically on the needs of gifted and talented pupils. The scale of the programmes has been small, but they have been effective in raising awareness of what can be done for pupils of high ability in both sectors. There have been benefits in promoting good practice, sharing expertise and extending provision among the partners.

Issues for attention

- A number of issues emerging from inspection of the programmes merit particular attention. They include:
 - improving methods for identifying gifted and talented pupils
 - engaging parents and pupils
 - developing subject-specific approaches
 - giving earlier attention to the skills of independent learning
 - making the most of additional provision
 - recognising the implications for staffing
 - improving monitoring
 - and, most importantly, establishing a secure basis for improving mainstream school practice.

Grant-funded programmes

Masterclasses

- 9. Ten masterclass pilot projects received funding for two years from 1998 to 2000 and focused on specific subjects within the curriculum and on encouraging continuity between primary and secondary schools. About 500 pupils were involved in the pilots. Schools were left some freedom over their definition of the kind of pupils to be involved, but had to include pupils with hitherto unrealised potential. Identification was made by both the primary and secondary schools.
- 10. The programmes aimed to deepen understanding and develop pupils' higherorder skills. Few of the programmes constituted true masterclasses in the traditional sense of classes which provide opportunities for pupils who have already achieved a high degree of specialised proficiency. The range of pupils prior attainment and capability of the pupils was usually too wide to meet this criterion.

Summer schools for gifted and talented pupils

- 11. DfEE-funded summer schools for gifted and talented pupils began in 1999 in pilot areas and were extended in summer 2000 to virtually all LEAs and Education Action Zones. In summer 2000, some 14,500 pupils were involved. The aim of the scheme is to extend and enrich the range of academic, social and cultural experiences of pupils. At least 50% of the pupils were required to come from Year 6. A further stipulation was that only a proportion of summer schools in any LEA could cater for the talented, as opposed to the gifted.⁵
- 12. LEAs were awarded £9,000 for each summer school and were responsible for deploying the funding. Some delegated the funding to individual schools that wanted to run a summer school; some used educational agencies to run the summer schools for them; others organised the summer schools centrally themselves.

Independent/maintained school partnerships

13. Schools wishing to be part of the independent/maintained school partnerships scheme bid for funding to the DfEE. The scheme began in 1998 and in its first three years supported 120 partnerships involving some 400 schools and about

⁵ These summer schools are to be distinguished from those staged at universities and funded by Excellence in Cities or the Sutton Trust.

36,000 pupils. The purpose of the scheme is to strengthen links between the maintained and independent sectors through drawing upon mutual expertise and resources. Not all programmes cater for gifted and talented pupils, but those that do offer a diverse range of extended opportunities for learning.

Excellence in Cities: the gifted and talented strand

- 14. Excellence in Cities began its first phase in September 1999 as a major initiative involving 24 LEAs in six major conurbations.⁶ Its structure is based on partnerships between LEAs and schools. Schools are allocated Excellence in Cities status based on the LEA in which they are located, rather than in relation to their individual socio-economic contexts.⁷
- 15. Excellence in Cities has a number of strands, of which that for gifted and talented pupils is one. The strand is predicated on the assumption that high achievement is possible for some pupils in all schools. Its aim is to identify those pupils' abilities and potential for achievement, including instances where these are not immediately apparent. The guidance calls for at least two thirds of the group identified to be gifted and the remainder talented. Each school is expected to have a plan to develop its provision. Programmes are also run centrally by the LEA.
- 16. Funding goes to the partnerships, which devolve some to the schools to fund their internal provision, including the work of a co-ordinator. Some partnerships also devolve funding to clusters of schools, while others use a 'buy-back' system to encourage schools to invest in cluster activities.

⁶ The initiative has now been extended to a further 31 LEAs and 12 clusters within LEAs, and covers primary schools and the post-16 sector.

There are wide differences in the contexts and the levels of achievement in the schools involved in Excellence in Cities. However, the data for all Excellence in Cities secondary schools give a broad indication of their pupil populations:

the average proportion of pupils aged 11-15 years eligible for free school meals is 26.8%, compared to 11.7% for schools outside Excellence in Cities areas:

[•] pupils of minority ethnic heritage form on average 20.7% of the number on roll, compared to 6.1% in other schools;

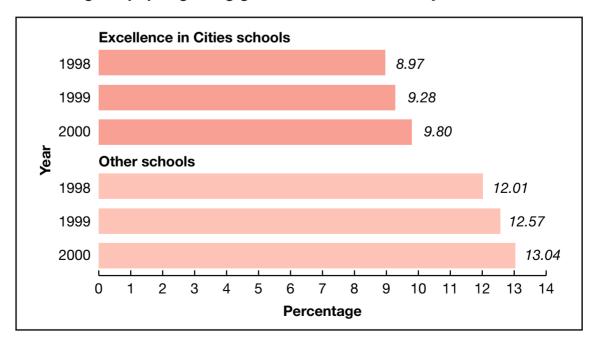
[•] the average proportion of pupils for whom English is an additional language is over three times higher than in other schools.

Effects on the progress of pupils

Excellence in Cities: the gifted and talented strand

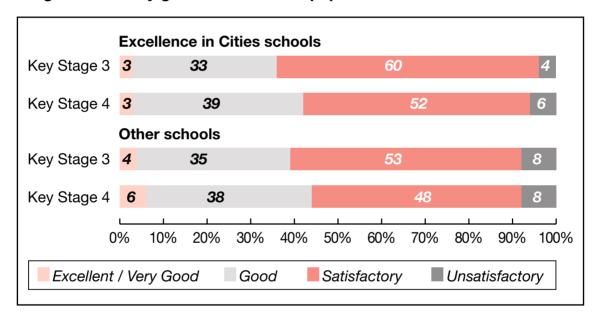
- 17. For much of the first year of the programme, which began in September 1999, schools and LEAs were preoccupied with establishing policies and structures for the work and with issues of identification. The timing of notification of the programme limited the changes that could be made in the curriculum and the organisation of teaching groups.
- 18. It remains too early to see the extent to which the provision made under the gifted and talented strand is having a sustained positive effect on the progress of the pupils identified. There are promising signs of the effects of additional provision, mainly out-of-school hours, but little firm evidence as yet of the impact of this provision, or, crucially, of work to improve the teaching of the mainstream curriculum, on the results of national curriculum tests or examinations.
- 19. The overall data on attainment provide a backdrop. Pupils in phase 1 Excellence in Cities schools performed at a lower rate than other schools in Key Stage 3 tests and General Certificate of Secondary Education (GCSE) examinations over the three years to 2000. However, based on an aggregation of performance in all core subjects at Key Stage 3, the schools improved at a faster rate (+1.3 percentage points) between 1998 and 2000 than other maintained schools (+0.8).

Percentage of pupils gaining grades A*/A in GCSE subjects



- 20. The proportion of pupils gaining grades A*/A in GCSE examinations is one measure of high performance. The chart above gives the figures for phase 1 Excellence in Cities schools compared with other maintained schools between 1998 and 2000. It shows that the gap widened over the period.
- 21. Under the school inspection framework applying from January 2000 inspectors have been asked to judge specifically the progress made by gifted and talented pupils in all schools subject to a full inspection.
- 22. The chart below gives the inspection judgements, by percentage of schools, in phase 1 Excellence in Cities schools, compared with secondary schools elsewhere, in inspections between January 2000 and April 2001.

Progress made by gifted and talented pupils



23. As the chart shows:

- gifted and talented pupils made good or better progress in Key Stage 3 in 36% of schools in phase 1 Excellence in Cities areas, compared with 39% of other schools
- at Key Stage 4, their progress was good or better in 42% of Excellence in Cities schools, compared with 44% elsewhere
- progress was judged unsatisfactory or poor in a smaller percentage (5%) of Excellence in Cities schools than elsewhere (8%).

The figures for both primary and secondary schools compare well with data from a 1998 OFSTED study referred to in the House of Commons Education and Employment Select Committee report on high-ability pupils. That study indicated that provision for very able children, defined as the top 5% by attainment, was a significant weakness in about a third of primary and secondary schools.

For comparison, the corresponding figures for the same period for all primary schools were 43% making good or better progress at Key Stage 1 and 44% at Key Stage 2.

- 24. In phase 1 Excellence in Cities schools where the progress of pupils is best, inspection reports refer to:
 - clear identification of all pupils' strengths and weaknesses
 - sustained support and encouragement
 - challenging tasks and activities which expect pupils to do more, to study in greater depth and to take more responsibility for their learning, and
 - in addition, some schools making it possible for pupils to take accelerated programmes in some subjects, for example in mathematics, and then to use the time saved to good effect.

Other programmes

25. Few of the organisers of activities under the other programmes covered in this survey were in a position to give an authoritative picture of pupils' progress. HMI were able to see clear progress in some cases, and sometimes over very short periods. There was more often strong evidence of effects on motivation, self-esteem and approaches to learning. However, since a weakness frequently found was in the feedback to the pupils' home schools, or in the use made of feedback by the home schools, the prospect that these benefits would be translated into lasting effects on progress was usually uncertain in the case of masterclasses and summer schools.

How are gifted and talented pupils identified?

Definitions

- 26. The definitions of high ability adopted by the DfEE in relation to grant-funded summer school provision and elaborated under the Excellence in Cities programme identify 'gifted pupils' as those with evident high attainment or latent high ability in one or more academic subjects (that is, subjects other than art, music and PE) and 'talented pupils' as those with evident high attainment or latent high ability in a creative or an expressive art or in a sport.
- 27. How to define and how to identify high ability among pupils have long been subjects of controversy in the research literature and in schools. With no common approach to identification, there has been no agreement about the numbers of pupils who might be included in the high-ability category. As the DfEE's Excellence for All Children stated in 1997, 'the definition and size of the 'academically able' cohort appear to vary according to geographical region and the forms of provision available'.
- 28. There have been common elements in the approach used in schools. Secondary comprehensive schools with a normal distribution of attainment among their intakes have broadly tended to refer to their top 20% as 'able pupils' and their top 5% as 'very able', with such ability being identified by cognitive tests or through levels of attainment, most often in English and mathematics. However, variations in practice in organising teaching groups within schools, by streaming, banding, setting or otherwise, reflect, in part at least, different positions on whether high ability is specific to subject fields or a general capacity.
- 29. Definitions based on attainment exclude, of course, those pupils whose latent ability has not been identified. Joan Freeman's definition of the 'very able' in her research study for OFSTED includes both high achievement and potential and covers both general and specific ability:

'the very able are ... those who either demonstrate exceptionally high-level performance, whether across a range of endeavours or in a limited field, or those whose potential for excellence has not yet been recognised by either tests or experts.'9

⁹ 'For comparison, the definition adopted by the United States Department of Education in 1993 (in National Excellence: A Case for Developing America's Talent) is as follows:

^{&#}x27;Children and youth with outstanding talent perform or show the potential of performing at remarkablly high levels of accomplishment when compared with others of their age, experience and environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not normally provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavour.'

30. The debates have also been concerned with the question of whether ability is innate or developed. 'Giftedness' and, perhaps to a lesser extent, 'talent' have been commonly associated with a notion of innate genius in particular fields – a level of ability, as Joan Freeman says, 'bestowed on high'. Research has generally identified gifted pupils through their very high scores in intelligence tests or through their exceptional attainment in one or more fields. Some have argued that the view of giftedness as innate underrates the contribution of motivation, application and dedication which are essential to high achievement; others that it neglects the fact that potential can only develop into high achievement if the right opportunities are provided.

Features of effective practice in identifying high ability

- articulation and discussion within the school of the characteristics of high ability and potential in subject contexts, including indicators of interest and high-level skills in approaches to learning and other activities
- systematic assembly and scrutiny of the available information on performance and potential, including information from screening tests and observation of pupils at work
- special attention to groups likely to be under-represented in lists based on current attainment because of lack of previous opportunity or for other reasons
- clear presentation to pupils and parents of the purpose of identification and the opportunities which are available as a result
- the involvement of parents and pupils in identifying strengths and interests in activities at school and elsewhere.

Excellence in Cities: the gifted and talented strand

- 31. A key feature of Excellence in Cities is that all schools are expected to identify 5% to 10% of pupils in each year as gifted and talented. These pupils are described as those who achieve, or have the ability to achieve, at a level significantly in advance of the average for their year group in the school. The definition is thus resolutely relative. However, it also has a normative element, in that it is expected that any school's list will have a ratio of gifted to talented pupils of at least 2:1. The Excellence in Cities guidance emphasises, however, that identification of gifted and talented pupils is not an end in itself, but is to help schools to address the needs of the most able and, in so doing, it is hoped, to improve the provision for all pupils.
- 32. Under the initiative, therefore, no school can say it has no gifted or talented pupils. An obvious consequence is that the composition of the gifted and talented population is likely to vary across a single partnership and across partnerships nationally. Pupils regarded as gifted or talented in one school may not be considered so in another school whose intake of pupils is dissimilar.

- 33. All Excellence in Cities schools visited by HMI in this survey were working broadly within the guidelines. Most schools had identified at least 10% and often more, including in a few cases numbers so high 30% or 40% as to risk diluting the concepts of giftedness and talent excessively.
- 34. The ways in which schools arrived at their lists of pupils varied, but generally the procedures used were rudimentary and did not do enough to ensure that the approach was systematic and inclusive, especially with regard to latent high ability.
- 35. Predictably, those pupils already achieving well above average levels in academic subjects, especially English and mathematics, and those for whom there was clear evidence of performance well above average expectation in art, music and sport, were fairly easily identified. Even in this respect, however, there were difficulties in the identification of Year 7 pupils in cases where weaknesses in the transfer and analysis of information from primary schools were exposed.
- 36. To identify their current high-achievers in academic subjects the schools used their existing assessment systems, along with national curriculum assessment data. Some used standardised tests, including cognitive ability tests, and assessment tools which offer predictions about future academic achievement. Performance in English and mathematics tended to carry particular weight for younger pupils.
- 37. It proved far harder for most schools to identify potential high ability among those recognised at risk of underachievement, including pupils who frequently change schools, those with poor behaviour and those in public care, and those at an early stage of mastering English as an additional language. The difficulty of identifying the underachievers was sometimes exacerbated by pupils' poor levels of literacy and oral communication. It can, of course, be especially difficult to recognise latent high ability when pupils are apparently uninterested in demonstrating what they might be able to do.
- 38. All the schools had an overt intention to be inclusive in their approach, but in most schools methods of identifying potential were at an early stage of development, even in the second year of the initiative. Most of the schools visited had the capacity to analyse individual pupil achievement, behaviour and attendance, but very few interrogated the data well enough, for example in terms of ethnicity and sex, to highlight those groups of pupils currently under-represented in the lists of the gifted and talented.
- 39. The use of non-verbal reasoning tests gave some indicators for investigation, as did the aptitude assessments made by some subject teachers. The weight given to teacher assessment varied from school to school. Some schools had begun to refine their procedures to include more systematic and substantiated input from

subject teachers. In one school, for example, teachers in each department were asked to nominate the 10% most gifted or talented pupils, and those thought to be underachieving. The lists were collated and discussed and the cohorts then decided.

- 40. Teacher assessment was the main component In the identification of talented pupils. Levels of attainment arrived at under national curriculum assessment usually provided the only form of recorded prior attainment. The approach used to gathering the assessments of teachers was often not consistent or secure. Uncertainties in this respect contributed to the fact that far fewer pupils were identified as talented than the initiative stipulated.
- 41. Physical education (PE) departments readily identified pupils who were good at the most popular school sports and often, as in football, these were pupils with access to local teams and weekend clubs. In solo sports, like gymnastics and swimming, the basis of identification was weaker because previous provision or information about it was less common. Lacking specific criteria, teachers found it difficult to identify aspects of performance which gave early indication of latent talent, which, if appropriately developed, might lead to high achievement.
- 42. Something of the same pattern was evident in relation to dance and music, where pupils with strong previous experience evident at transfer to secondary school were more likely to be identified as talented than others. This highlighted the importance of access to previous provision and the crucial factor of parental support, including the ability to pay, for example, for instrumental music tuition and transport. Some schools were alert to this issue and screened pupils for voice and instrumental aptitude in an effort to identify those who had had no previous opportunity. In other schools pupils were invited to volunteer for selection but this, of course, depended on the confidence and motivation of the individual pupils.
- 43. A small number of schools involved pupils and their parents in the process of identification. Some used questionnaires to record particular achievements, such as taking part in school performances and plays or representing the school in competitions or exhibitions across a wide range of subjects and took account of this information when drawing up their lists. A few schools also asked parents to identify what they felt were their children's strengths and interests and took note, for example, of leisure activities which demonstrated high levels of application, persistence and physical or other skills. This helped to ensure as full a coverage as possible and actively enlisted the support of parents.
- 44. Some schools, however, were reluctant to inform parents about the initiative at all. In one school, for example, concern was expressed that some parents would perceive the gifted and talented initiative as divisive. In another school, teachers felt that parents would be concerned that, if their children were not identified, they would

be classed as second-rate and consequently disadvantaged. Another school was concerned that if parents were told that their children were gifted or talented, they might develop unrealistic expectations of them. These schools preferred to carry out their programme without overt reference to its existence rather than risk confrontation with parents. Such worries about parental reaction may be understandable, but the decisions made in response to them run against the spirit of the initiative and its effective management.

- 45. Schools had also to consider the need for movement in and out of the groups of pupils identified as gifted and talented. The Excellence in Cities guidance expects that the groups will be flexible, with new pupils joining and others moving out. Just how this is to be handled from the point of view of individual pupils and parents is a sensitive matter, and one which many schools visited hoped to avoid.
- 46. There were also worries about the reactions of pupils. While many schools had concerns about making overt reference to their gifted and talented pupils, those pupils who were aware of being so identified were generally positive about it. It could be that in these early stages the pupils being identified were those whose achievements had already brought them a sense of self-worth, which identification as gifted or talented confirmed. In a few cases pupils were not sure exactly what being gifted or talented meant, but they knew that the work was intended to be more challenging for them. They were proud of being 'special' and enjoyed being part of a group recognised for its potential to achieve at a high level. Many made specific reference to the time and effort teachers put into organising out-of-hours provision and other special programmes and recognised the additional benefit to themselves.
- 47. However, not all pupils were sanguine about being identified: a few felt that it put unwelcome additional pressure on them. Some pupils did not want to reveal how much they understood or what they were involved in outside school.
- 48. On the other hand, some pupils not identified clearly felt it unfair that they were excluded from activities and were demotivated as a result.

Other programmes

49. Ten schools or groups of schools participated in a pilot project for the provision of masterclasses for able pupils. They were left some freedom over their definition of which pupils to include. They were expected to include not only high-achievers but also pupils with potential for high achievement that had not yet been realised. Flexibility in identification procedures, combining the objective evidence of testing with subjective findings of teachers, was the most effective approach. The identification of underachievers with potential for high-level performance was a difficulty which all schools faced, most especially in relation to those who underachieve through disaffection, poor motivation or low self-esteem.

- 50. In one masterclass pilot project for sport, there were two main sections for tennis and generic PE skills, to which a third, in netball, was later added. The co-ordinators' roles in both the original masterclasses were focused on identification of talent and on co-ordination and delivery. They had the added responsibility for monitoring and evaluating the success of the project in liaison with external agencies. Identification of the target group in tennis utilised the Lawn Tennis Association's guidelines. Selection was made using these guidelines and all parents accepted places offered to their children. The second class, concerned with generic PE skills, were identified jointly by the masterclass co-ordinator, the headteachers from the four primary partner schools, the primary liaison teachers and the PE co-ordinators.
- 51. The identification of pupils in this masterclass was judged to be good, with programmes being effectively planned to match the potential of the participants. In the tennis class, standards were very high and the class made use of specialist coaches to enable children to develop their skills and tactical understanding. The generic PE class had a more complex programme and faced the difficulty of addressing how to apply the skills acquired to improving performance in single activities. Again, the success of the class depended upon good identification of potential and access to high-quality coaching and facilities.
- 52. The approach to the selection of pupils was different in the gifted and talented summer schools. One in three **summer schools** allocated to an LEA was allowed to focus on pupils with talent in sport or the arts. Where one school was allocated, it could be a mixture of gifted and talented, and if there were two, one could be exclusively for the talented. LEAs and schools appreciated and took advantage of these options. There was considerable flexibility in some areas in interpreting the criteria.
- 53. A requirement was that the schools should provide only for pupils in Year 6 to 9. Half of the cohort had to be completing Year 6 (or, for LEAs with a three-tier system, the appropriate year group for transition to upper school). There were to be at least 30 pupils a target quite frequently not met and they should be from the most able 5% to 10%.
- 54. Identification procedures for the summer schools used cognitive ability tests, national curriculum test results at Key Stage 2 and teacher assessment to target the top 5% of Years 7 and 8 within a secondary school. In another case, in a small LEA, up to five Year 6 pupils were nominated by every junior or primary school.
- 55. In **independent/maintained school partnerships**, once the funding had been provided it was left to the schools to nominate and identify the pupils. The focus in the programmes visited was on groups rather than individuals. The pupils were involved because they were in a particular year group or set which was studying a specific subject or aspect of a subject. In other words, the benefit of the partnership

activities was seen not so much in increased identification of particular pupils, but in wider or deeper provision for groups within the school.

Effective approaches to assessment in subject contexts

- 56. An important finding from the visits was the need for fuller and more systematic exemplification of effective approaches to assessment within subject contexts. Those involved in the programmes, with the exception of the independent/maintained school partnerships, faced difficulty in identifying latent high ability in subjects with sufficient consistency and sensitivity.
- 57. Effective approaches are based in part on an intuitive understanding of how approaches to learning shown by young people in a subject correspond with the behaviour of high-achieving adult practitioners in the field. Useful tests of aptitude are based on good models of such behaviour, although they are sometimes artificial.
- 58. The best practice in the secondary schools visited in this survey and in related exercises was shown by specialist teachers who followed their professional instincts. Essentially they reflected on pupils' performance in informal tasks and activities to see what it demonstrated about the approaches to learning. In some subjects, such as MFL, music and the visual arts, teachers occasionally made use of more formal aptitude tests of special ability. A more common approach was the setting of 'challenges', sometimes inspired by external award schemes, which put the premium on flexible thinking, applying skills to unfamiliar problems and designing imaginative solutions.¹⁰
- 59. Whatever the means used, the key was the astuteness of the observation and reflection on it. In **music**, for example, analysis of approaches to learning identified pupils who, among other characteristics:
 - are more attentive than others when music is played, ask questions and want to discuss their own musical experiences
 - sing tunefully and with enthusiasm, repeating extracts of songs sung with them, and enjoying the sharing and revisiting of the experience
 - are fascinated by the sounds of musical instruments, focus intently when they see and hear them live, volunteer when offered the opportunity to play a musical instrument and are confident to display their skills to the rest of the class
 - enjoy the composing activity and like to lead the group, looking around the rest of the group and acknowledging when musical entries are made.

The 'world-class tests' being developed by the Qualifications and Curriculum Authority (QCA), seek to capitalise on the element of challenge and invite pupils to use their knowledge and understanding to solve problems or pose hypotheses across a range of tasks. For background to the development, see Assessing Gifted and Talented Pupils, QCA, 2002.

- 60. In **ICT** observations highlighted those pupils who:
 - learn new applications, including short cuts and elegant methods in them, at a fast rate and have an intuitive approach to extending their use of applications
 - have the ability to grasp and premeditate structures, for example structures in data and directories
 - are capable of visualising presentations when using ICT
 - are intrigued, rather than frustrated by problems, and show tenacity and creativity when solving them
 - show a high level of confidence and independence in their use of ICT
 - have the inclination and appreciation to help others, including in explaining the logic of the steps to take
 - show curiosity for example, about how hardware and software works or what the components of web addresses mean.
- 61. Skilled teachers of **MFL** were particularly careful not to confuse previous learning in the language with giftedness. They could pick out pupils who showed particular aptitude across the language forms and who, for example:
 - can hear sounds accurately and mimic precisely with minimum repetition
 - when speaking the foreign language, put words together, searching for natural and graceful forms, rather than giving simple word responses
 - strive to deduce meaning, using the language they know to make sense of new words
 - are quick to spot grammatical patterns and understand the function of words in a sentence.
- 62. Informal observation of pupils at work helps to clarify what to look out for as predictive signs of high ability in the subject, rather than relying on the school's end-of-unit or end-of-term tests, which usually define attainment more narrowly. Analysis of approaches to learning of this kind was, however, rarely codified and discussed in the schools visited.

What is on offer for gifted and talented pupils?

Definitions

- 63. 'Enrichment' and 'extension' are often used interchangeably to define the provision made for pupils of high ability. The DfES tends to use 'enrichment' to mean studying material from the school's existing subjects or new subjects to give greater breadth, and 'extension' to mean studying material from existing subjects in greater depth.
- 64. There were examples in the survey for instance, through masterclasses of pupils being given the opportunity to expand the scope of their learning through studies which are additional to the mainstream curriculum. This involved, for example, studying a new subject pre-16 such as psychology, archaeology or an additional language. There was relatively little evidence of such provision in the Excellence in Cities schools visited, although some schools have continued to make well established provision for extra subjects, usually at Key Stage 4 for GCSE examinations, with higher-attaining pupils being the most frequent attenders.
- 65. More common were activities which were supplementary to work within subjects already being studied in the mainstream curriculum. The activities were intended to add depth and challenge. Typically, such work concerned aspects not covered, or not covered in depth, in the age-related national curriculum programmes of study and gave pupils the chance to work in a sustained way over time on a specific project.
- 66. 'Acceleration' is most often used to mean moving a pupil up to join a class of pupils who are a year older. It can also mean that where pupils show outstanding ability in a particular subject, they work with older pupils in that subject only. Another form of acceleration is reducing the time taken by groups or individuals to complete a course of study. Early entry for GCSE is the most common example. The incidence of it is increasing: the percentage of pupils taking between one and three GCSE examinations before Year 11 in maintained schools rose from 0.63% in 1998 to 1.13% in 2000.¹¹

Excellence in Cities: the gifted and talented strand

67. Guidance to schools makes it clear that they should develop 'a distinct teaching and learning programme' for their gifted and talented pupils which should be recognisably different from that followed by pupils outside the cohort. In addition,

The percentage of pupils achieving A*-C grades in their early entries fell over the same period from 78% in 1998 to 73% in 2000. The average points score per examination for pupils taking 1-3 GCSEs in Year 10 in 2000 was 5.2, representing a C/B grade per examination.

schools should offer complementary study support activities for the identified pupils. The aim is to ensure that what is on offer is challenging and engaging and at the same time coherent and integrated. It should develop strengths and tackle areas of relative weakness.

- 68. The Excellence in Cities guidance hoped that the initiative would help to change the approach to curriculum organisation in schools. It was not yet doing so to any significant degree in the schools in the survey. There were as yet few signs of radical changes to the organisation of classes or the curriculum and its teaching. The initiative had not yet taken root in schools' structures in this way.
- 69. Schools began by using the funding to enhance normal curriculum provision rather than beginning with revision of the existing curriculum programmes. The most common approach was to arrange visits to museums, galleries and theatres, field and study visits, and to set up workshops, out-of-hours clubs and work with specialist associations and advisers. In one school, for example, the provision included:
 - a week's residential course for five Year 8 pupils on 'sustainability in the environment'
 - masterclasses in music and drama
 - a 'think club' for more able Key Stage 3 pupils
 - singing lessons for talented pupils
 - twilight sessions leading to GCSE entry in dance, PE or expressive arts
 - an increase in time for a foreign language assistant to support capable linguists
 - coaching sessions for candidates entered for high levels in Key Stage 3 tests.
- 70. Much of this is what one teacher described as 'the kind of work we know will be valuable but have not been able to fund until now'. In the best practice, schools considering additional provision out-of-school hours had investigated closely what was already going on the area so as to avoid duplication and to look for positive connections, for example with supplementary schools.
- 71. Alongside this provision many schools had introduced more work on basic skills, recognising that unless these were systematically developed, pupils would be unable to benefit from enhanced provision. This was particularly the case for pupils identified as having high potential in academic subjects, but whose basic skills were relatively weak.
- 72. Homework clubs, study skills sessions and revision courses were established or extended to focus on specific and commonplace learning needs, and to inculcate habits associated with organising learning: regular attendance; remembering necessary equipment; learning how to access specialist provision such as ICT; developing independent learning, self-reliance and responsibility. Some of this work was at a low level.

- 73. Many of the schools visited were improving provision for ICT, including refurbishment or development of new suites with more up-to-date hardware. No particularly innovative practice in the use of ICT was seen in the visits made to Excellence in Cities schools. Some teachers reported that Internet access was beginning to make a difference to the quality and range of resources available to pupils as for example, in MFL, where pupils used ICT to access challenging reading material.
- 74. The scale, quality and speed of the initial development within schools depended greatly on existing management structures. In one school with very effective management, all departments were required to submit a development plan during the pilot year. The wide range of provision included:
 - early entry at GCSE in mathematics and art
 - access to a laptop computer for use at home for pupils identified as in the top
 10% within a particular subject
 - material for independent learning, including use of intranet and the Internet in an out-of-school setting to boost A*/A grades at GCSE
 - additional specialist instrumental music teaching for talented pupils
 - an artist-in-residence working with a group of talented pupils
 - masterclasses in sport, including judo
 - a mixed Gaelic football club which competed against teams in Ireland
 - study groups before and after school in mathematics and arts to explore unusual or novel aspects of the subject at a high level
 - masterclasses in aspects of history, science, ecology, sociology and mathematics.
- 75. The quality of development plans varied widely across this school. Some departments took an innovative approach, while others limited their planning to increasing resources with no changes planned to the curriculum or its delivery. The senior management team took account of these responses in re-shaping the school development plan to ensure that support would be effectively targeted.
- 76. Pupils' comments in response to an introductory course were overwhelmingly positive.

'I chose "Secret Magic" because it sounded interesting, different and unusual. Not like the kind of thing you would do at school usually. The course tutor taught us about great mathematicians of the past ... I learned several different methods for doing things in maths. I had no idea there were other ways. I didn't like maths before and thought of it as quite shallow. I now look upon maths in a different light and realise it has depth and meaning and how it applies to life.'

'I come to my maths lessons with a better attitude - I respect it more.'

'The ways of thinking in history hadn't occurred to me before – I started to see that it wasn't simple – and the course made you start to understand how it was from different sides – I loved it.'

'I never thought I was clever but now I think I might be.'

'They (the teachers) go to a lot of trouble to plan all this and it makes work more interesting – some things you really look forward to. I've never really thought about working before – but I'm doing it for some subjects.'

- 77. The best programmes opened up the subject and showed pupils something of the fulfilment possible in intellectual endeavour and exploration. The programmes sought to raise the pupils' expectations of themselves; to sharpen and apply their basic and more advanced skills in learning; and to extend their horizons beyond the school and the neighbourhood.
- 78. Some of the work included a focus on teamwork in practical and investigative projects alongside pupils and teachers from other schools. For example, in one school, four pupils identified as talented in art went to the art department of a college of further education to work alongside students exploring new media and techniques. The pupils were clear that the experience had been valuable. It offered them a taste of what it might be like to study a subject at a higher level, as well as the chance really to think about art itself, to concentrate and experiment. They were able to explain how they had increased their knowledge and understanding and learned new techniques which they had applied in subsequent work for their portfolio, as well as to consider critically what would improve their work.
- 79. Much of this work was still at an early stage. While in some schools the activities were imaginative and capitalised on a range of resources, including industrial practice and the work of various professionals, in others the activities were largely improvised and were not based on a thinking through of what a systematic programme could focus on and achieve.

Other programmes

- 80. Courses in the **masterclasses** pilot were of three types: those that offered accelerated study of an aspect of the subject; those that concentrated on broadening understanding; and those which sought to develop generic skills although there was considerable overlap between the three types. Courses were of many forms and covered a range of subjects, including MFL, science, mathematics and PE.
- 81. In the tennis courses seen, coaching had already been tried and tested and benefits were immediate. In mathematics, accelerated programmes combined with problem-

solving were particularly effective. In a course of the second type, the emphasis was on the development of higher-order skills in science through existing schemes. Here the approach used in the Cognitive Acceleration in Science Education (CASE) materials led on to an applied project on space in conjunction with British Aerospace.

- 82. Most pupils were judged to have benefited a great deal from projects with an ICT focus. They had gained in knowledge and understanding, developed more maturity and were keen to continue. Some could have achieved much more and some of the underachievement resulted from staff inexperience with such able pupils. In addition, there was some confusion about whether the intention was to broaden the study of a subject or to provide an accelerated route through the national curriculum programmes of study.
- 83. The ground rules for the **summer schools** in 2000 were made as flexible as possible to facilitate speed of response. Summer schools were rarely fully subscribed and, in some LEAs, primary schools were slow to recommend appropriate pupils. However, attendance was good among those who enrolled. Venues ranged from maintained and independent schools to universities, art colleges, country houses and outward-bound centres. Some children were given the chance to board; others had the opportunity to work away from their school for the first time.
- 84. Partnership was at a premium. Many commercial firms expressed interest but required greater notice than they were given, although there were some success stories. Funding was adequate in all cases and often used creatively to stage performances, arrange outings and purchase materials. Sponsorship was very limited because businesses allocate funds well in advance.
- 85. The provision in many of the summer schools was good and in a few it was very good. The summer schools were put in place late in the school year and although a few LEAs and schools had anticipated the opportunity and prepared appropriately, this was the exception rather than the rule. As a consequence, co-ordination tended to be rather loose and plans for monitoring pupils' progress were usually weak. Nonetheless, there were some exceptional programmes in a range of contexts. Imagination was shown in venue, provision and choice of theme. Teaching was generally of a good quality and pupils' responses were almost always positive.

'I was excited and nervous at the same time, I thought even though I was one of the cleverest from my school, I might not be up to the standard of children from other schools.'

'It's not as boring as you think, you meet new friends and the teachers aren't like teachers.'

'I enjoyed being with children who are of the same ability as me, as I am usually bored with the work at my old school.'

'I really enjoyed summer school. I made lots of friends and have been able to communicate with children as advanced as me.'

'It was a bit strange not being top of the class any more but it was good to be able to discuss things properly too.'

- 86. In the **independent/maintained school partnerships**, the funding was in the hands of the host school. In the programmes visited, this was the independent school. The funding was spent according to need by the school's co-ordinator. All the schools visited were enthusiastic about the opportunities the funding had given them. In a few cases where the LEA was centrally involved, the LEA nominated a co-ordinator.
- 87. Schools were able to develop their normal curriculum provision and to have access to facilities not available in their own school. For example, in one partnership the opportunities included: video-conferencing for GCSE German; shared music and drama training, practice and performance; and work associated with GCE A-level biology. Although the funding has now ended, the partnership continues, to the advantage of both schools. They see the partnership as of mutual benefit: the independent school is all-boys and selective, with a strong choral tradition, while the maintained school is comprehensive and has a tradition of research into environmental issues.
- 88. In another example, a partnership between a comprehensive school and a nearby independent school focused on raising standards in MFL. Timetables between the two schools were linked to enable sixth-form pupils from one school to come to the other school, which does not have a sixth form, to act as mentors for Year 8. This project had the specific aim of the achievement of GCSE French at A*-B by the end of Year 10 to enable pupils to take AS-level French or GCSE Spanish in Year 11 before transferring to their new A-level setting. Communication and collaboration were strengthened through e-mail and video-phone.
- 89. Pupils were overwhelmingly enthusiastic about the increased opportunities the programmes had given them and the benefits which had accrued from working with pupils from another school. The contribution of the programmes in these respects was significant.

What does good teaching of gifted and talented pupils involve?

Features of effective teaching

- a high degree of subject knowledge
- understanding of how to plan classwork and homework in order to increase the pace, breadth or depth of the coverage of the subject
- the capacity to envisage and organise unusual projects and approaches which catch pupils' attention and make them want to explore the topic
- the use of tasks which help pupils to develop perseverance and independence in learning through their own research or investigation, while ensuring that they have the necessary knowledge and skills to tackle the work effectively on their own
- the use of demanding resources which help pupils to engage with difficult or complex ideas
- the use of ICT to extend and enhance pupils' work and the opportunity to present the outcomes to others
- the ability to deploy high-level teaching skills in defining expectations, creating a
 positive classroom climate for enquiry, asking probing questions, managing time
 and resources, and assessing progress through the lesson
- the confidence to try out new ideas, to take risks and to be prepared to respond to leads which look most likely to develop higher levels of thinking by pupils.

Excellence in Cities: the gifted and talented strand

- 90. Excellence in Cities sees the foundation for success in mainstream classroom provision. It sets a challenge for teachers to design a more demanding programme for the pupils to achieve high levels, delivered through imaginative and sometimes new approaches planned to engage them.
- 91. As the experience in the more effective schools visited demonstrated, to do this teachers need to follow the example of the best teachers and lift their teaching on to the next level through planning more creatively, using more demanding resources and teaching pupils deliberately how to engage fully with a subject. There was a recognition in these schools that improving the quality of teaching for gifted and talented pupils significantly was likely to need important changes to the curriculum and school organisation.
- 92. In all the schools visited, classroom practice was of variable quality across departments. Often the most effective provision was in lead subjects, chosen because of their success to spearhead developments. There was as yet little development in teaching approaches in other departments. Part of this stemmed from teachers' uncertainty about what they should be doing in order to provide adequately for gifted pupils both in the classroom and in additional provision.

93. Good teaching for gifted and talented pupils has the essential characteristics of good teaching for any pupil but it is particularly dependent on the teachers' own specialist expertise and scholarship. In the best lessons seen, teachers' knowledge of the subject was very secure. They were aware of the possibilities in the lesson and had the confidence to explore imaginative contexts or devise creative challenges. They showed flexibility in the presentation and the content of the lesson in order to match the different needs of gifted pupils and the nature of the topic.

Year 7 history

This mixed-ability class was working on the importance of the Church in the Middle Ages. The teacher had seemingly boundless enthusiasm. He knew the pupils well and set a pace which was breathtaking. He explained the key words for the session and then recapitulated with a quick-fire challenge, picking pupils apparently, but not actually, at random.

The teacher then delivered a short exposition in sermon style, which focused on the different pathways to heaven for the rich and the poor. The teacher's use of time was excellent, using devices such as a TV quiz-style countdown to maintain the rapid pace. The whole lesson had the style of a game, played at breakneck pace. There was constant change of focus, rarely more than four or five minutes on any one task, but all built into coherent work.

Very good use was made of source material, chosen to suit the pupils' abilities. Some of the texts were in Chaucerian English, and difficult to read, but the most able pupils, to whom the texts were given, rose to the challenge of selecting the required information. In their work on these texts and more generally, the most able pupils had the opportunity to shine because there were both challenging and open-ended tasks which allowed them to think for themselves and to develop and expand their own views.

- 94. The best teachers seen knew how to create a classroom climate in which pupils were motivated to learn by:
 - communicating an enthusiasm for the subject
 - devising projects and tasks which were exciting and intrinsically worthwhile
 - modelling more advanced ways of thinking through talking aloud while working through a problem, so that pupils could appreciate how to solve it
 - planning opportunities for pupils to work in different groups, explain their ideas and listen to others for a purpose
 - showing pupils how to tackle complex tasks, using their knowledge and experience to approach a new task
 - emphasising achievement in learning and behaviour, even when the conditions for learning were difficult
 - keeping alive pupils' belief in their own capabilities.

Year 8 dance

The class contained nine pupils from the school's gifted and talented cohort. The aim of the lesson was to enable pupils to understand the concept of fluidity and the seamless transition from one movement to another, then to emulate it in their own creative performances.

The pupils watched a short video and were encouraged by the teacher's probing questions to analyse critically the dancers' movements: what worked, and what could be improved to better express the underlying concept. They worked on these ideas in small groups, creating their own sequences of movements based on those they had seen, but developing further the idea of transition. The teacher – an expert dancer herself – moved assuredly between the groups, demonstrating new techniques, encouraging further development and challenging the pupils' creativity, and enabling each pupil to improve their own performance. Talented dancers among the pupils were shown a further range of more complex movements which relied on balance and co-operation, so that they used well their additional strength and suppleness. They reached an outstanding level of performance.

The expectation of effort, concentration and critical appraisal of performance was evident throughout. The pupils responded with enthusiasm and showed initiative and creativity in taking forward the initial ideas of the session to develop dances of their own.

- 95. Effective planning illustrated what the common phrase 'stretching the more able' can mean in practice. It can involve increasing:
 - the pace of learning for example, by expecting that pupils in an English class will read the novel they are studying for themselves, or that pupils in a mathematics class do not need to repeat standard calculations
 - the breadth of learning for example, by engaging pupils in a geography lesson in exploring an issue in a range of regional contexts, rather simply in one
 - the depth of learning for example, by considering in a science lesson how tests of effects work in different circumstances.

Year 9 German

A top set German class learned very quickly how to narrate a sequence of leisure activities using a range of time expressions in a lesson conducted by a teacher with an excellent knowledge of the language. He had good rapport with the pupils, who appreciated his rigour and his humour. He was successful in getting pupils to ask as well as answer a range of questions. Every minute of the 60-minute period was used to the full and resources were exploited well. They included high-quality flashcards based on real photographs and prompt sheets with diagrams to aid the flow of pair work and later narrative. Expectations were high and pupils responded very well to friendly pressure.

Their responses were used to provide feedback to enhance the narratives of individuals in the class. An excellent recap at the end of the lesson used pupils' contributions and well-designed homework was set involving writing a piece in German on leisure.

Attainment was high, with very good comprehension and pronunciation. Pupils showed an impressive range of vocabulary and ability to handle confidently structures including time expressions. Their rate of progress over only one term of German was very good. Within this lesson it was reflected in honing pupils' pronunciation, extending their vocabulary and consolidating their grasp of features such as compounds and word order.

96. In the best teaching, teachers were highly skilled at on-the-spot diagnosis, identifying through questioning and observation what pupils found difficult and then clarifying points and re-directing attention while keeping sight of the learning objectives. Questioning with rigour and depth, and demanding more extended responses were recurring features. The teachers provided good models for pupils of well-reasoned response and encouraged pupils to use precise language. The steps of learning were well supported in lessons and homework was used effectively to consolidate learning and to develop independence.

Year 9 mathematics

The class was working on the structure of quadratic equations. The teacher demonstrated an excellent knowledge of both the subject and his pupils' capabilities. He targeted questions precisely for each pupil, challenging them first to recall and use familiar ways of solving problems, and then, when these methods no longer worked, pushing them to think laterally to find new ways of exploring the relationship between numbers and reaching a deeper level of mathematical understanding. He used their mistakes productively to arrive at different approaches to solving an equation, and encouraged pupils to pursue and develop their own ideas, by demonstrating new techniques or using equipment such as a graphical calculator.

The effect was to make pupils alert and excited by the work. They were innovative and creative in their solutions, and their success built up confidence to take on the next challenge. They used mathematical language, such as vector, coefficient, translation vertex, gradient and constant, naturally and vied with one another to see who could solve the problem first. Pupils' attainment was well above average, at level 7, with a third of them reaching level 8. This represented excellent progress among the group and reflected a high level of motivation.

Year 9 religious education

The aim of the lesson was to deepen pupils' understanding of the religious and philosophical beliefs of Martin Luther King in the context of the civil rights movement. The teacher used a range of different resources, including some very demanding texts,

to develop pupils' knowledge and insight into the conflicting views within the different communities of the Christian church in the United States. Good questions and oral work gave pupils the opportunity to recall what they knew, and to listen to the perceptions of others.

The teacher was able to pose challenging questions and help pupils to examine the notion of 'conflicting goods' and moral dilemmas. They were expected to identify and investigate issues in pairs or small groups and to use data on health, housing and earnings to support their views.

Following a well-informed and well-structured introduction, the pupils responded well to the expectation that they would recognise the complex moral and ethical decisions faced by individuals and be able to evaluate the belief and value systems which shaped responses. In group work the teacher supported students by modelling complex reasoning, posing alternative propositions and considering consequences.

Pupils worked at a fast pace and proposed their own areas for research on a critical reflection on Martin Luther King's legacy. The pace was fast, pupils' oral and written work was of a high standard and their understanding of complex issues noticeably advanced. Homework was supported by an assessment sheet which made marking criteria explicit.

- 97. Good teachers used a range of assessment methods to monitor pupils' progress in lessons and homework. They regularly employed probing questions and well-focused, sometimes very short, tests and set demanding tasks which would illustrate the extent of understanding. Marking was an integral part of this process: teachers were able to identify gaps and misconceptions as well as giving pupils clear feedback on where their work was good and why.
- 98. In addition, teachers involved pupils in the setting of targets and in specifying the form and content of improvement as a means of helping them to see purpose and possibility beyond the immediate task. A review of progress and joint setting of future targets prompted serious involvement. In one school, for example, pupils helped to design out-of-hours revision classes in science by identifying for themselves their individual areas of weakness.

Year 10 drama

The class, which included gifted and talented pupils, was working on a topic about freedom movements, based on an account of the history of 'the disappeared' in 1970s Chile. The pupils had written and practised their own scenes based on this topic.

The management of pupils was confident and very good use was made of time. The teacher recapped the political background. The preparation of the class was clear and meticulous.

The teacher led a discussion about the purpose of drama and what it can achieve. She developed the idea of critical analysis in a non-threatening manner, giving the pupils clear advice on what to look for in their own and others' work. The focus of evaluation was precise. The groups performed their scenes in turn. The pupils were able to be self-critical and evaluate performances objectively, debating their quality in a mature fashion and making good practical suggestions for improvement.

The teacher ensured good use of technical vocabulary and took these able pupils forward by highlighting clearly what constitutes good quality in staging, use of lighting, backing music and other theatrical devices, as well as in individual planning and performance skills. A challenging writing task for homework completed this session, in which all pupils made excellent progress.

- 99. In the majority of schools, co-ordinators and lead departments identified differentiation as an area for development. The need for differentiation is often clearly recognised in relation to mixed-ability classes but, in classes setted by ability, it is sometimes assumed that pupils learn in much the same ways and at a similar pace. In the more effective schools, schemes of work were being devised to improve all pupils' basic skills within individual subjects, and to develop higher-order skills, such as analysis, synthesis and prediction, much earlier than previously.
- 100. Workshops, revision courses and some homework clubs supported this development, and in some cases schools had substantially increased library and ICT resources to develop independent learning. However, some schools had not sufficiently recognised the need to develop literacy within subjects.
- 101. There were few changes to existing means of organising pupils into teaching groups, although one or two schools had created additional small sets in some subjects for their most able pupils. Opportunities for flexibility through short-term programmes, such as bringing groups together for plenary and special projects, pairing groups, separating boys and girls, were occasionally taken up. Some schools had taken the opportunity to try out single-sex grouping to address underachievement. It was too early to assess the effectiveness of this approach.
- 102. Schools in Excellence in Cities are expected to consider acceleration as one of the ways of providing for their more able pupils. Few pupils were being accelerated into the year group ahead of them. Schools were nervous that pupils might not be mature enough to cope, that they would lose touch with friends or that they might achieve lower grades in examinations.
- 103. Relatively few schools among those visited entered pupils early for one or more GCSE examinations. Some teachers believed that early entry for examinations curtailed opportunities for the enriching exploration of subjects not usually covered in

coursework. Some believed that pupils are more likely to regard a subject as 'finished' if they take GCSE early and so are less likely to keep their advanced study options open. Where early entry was used, art and mathematics were most frequently the subjects involved.

Other programmes

- 104. An emphasis on increasing the pace of learning was common in masterclasses. Teaching in these classes tended to be above average in quality. Good lessons seen were characterised by clear frameworks, high expectations, shared discussion and scope being given to pupils to develop ideas. Opportunities given to pupils for independent thinking and expression marked out the very good lessons from others, as did exploration of ideas new to the pupils.
- 105. One masterclass in MFL offered progression from Year 6 to Year 8, when pupils will take GCSE. The scheme of work, however, needed to ensure more progression in teaching, with due attention to grammar and structure. The work was characterised by thorough preparation, a spirit of enquiry, and enthusiastic involvement in class and group discussion and in research. Good listening skills were much in evidence. By contrast, in some groups, failure to provide alternative or extensive tasks for pupils who finished tasks quickly left them with time on their hands.
- 106. Teaching in **summer schools** for the gifted and talented was generally of good quality. The best teaching generated excitement among the pupils, combined with opportunities to explore new ideas, develop new techniques and acquire knowledge. It was distinguished by thorough planning, skills in managing groups, clear and exciting exposition and a shared sense of purpose.

A summer school session on Sophie's World

In one summer school for the gifted and talented there was consistently challenging and exciting teaching. Sessions varied in format through a range of lessons, tutorials and seminars or a combination. One session on the book *Sophie's World* focused on Aristotle, Diogenes and the Stoic view of good and happiness. The explanation and exposition were articulate and the pupils contributed fluently to the debate which was sustained. The tutor carefully refocused attention as necessary. Distinguishing features included power of reasoning and clarity of questions in grasping ideas. By the afternoon, all pupils were thoroughly absorbed and a hat was passed around the group as a means of managing the discussion and taking turns. The debate crystallised into 'does wisdom equal knowledge plus experience?' The session very clearly raised confidence, widened horizons and facilitated participation. Logical thinking, as well as speaking and listening, were clearly developed to a high level in the time available.

107. Such teaching was not confined to current school teachers but came from college lecturers, arts and crafts practitioners and LEA advisory teachers and advisers. However, some outside lecturers were unclear about the nature and expectations of the group and the context in which they were working.

A summer school session on designing film sets

Pupils at a summer school were asked to design and make model film sets for an adventure movie. This activity was designed to develop skills such as working together and defining and delegating tasks; as well as technical skills in designing and using electronic control systems and construction techniques. It gave opportunities for pupils to show and develop imagination, creativity and perseverance.

The task, set to 90 Year 6/7 or Year 8/9 pupils in units of 30, in groups of 5 or 6, was exciting. They had to produce a working model of a set for an action film, complete with lighting, sound, scene movements and so on. The initial stimulus, showing film excerpts and a text description of scenes, clearly motivated pupils. A theatre visit set the model in a full-size context. Team working was effective. The activities were structured according to a standard design and technology rationale, with focused practical tasks to ensure that pupils had the knowledge and understanding (computer control of lights and motors, construction techniques, and so on) which they were expected to apply to meet their objectives.

Pupils' responses were exceptionally good. They clearly found the work challenging but responded well to it. The open-ended task allowed them to develop their ideas as far as they were able. They were highly motivated, divided the work between them, surprised themselves by what they achieved, met deadlines for the presentation of their scene and learned a great deal about computer control and the interaction of objective and subjective design criteria.

108. Teaching seen in the independent/maintained school partnership programmes, whether by video-conferencing or in a traditional classroom setting, was generally very good. There was usually a sense of shared excitement and expectation, variety of pace and activities, and clear objectives.

How well is provision managed?

Excellence in Cities: the gifted and talented strand

Features of effective management

- the school's capacity to integrate different forms of support from a variety of funding streams into coherent and well-focused provision
- a co-ordinator with a clearly defined role and the authority to carry it out, supported by the active involvement of senior management
- leadership from heads of department on:
 - the identification of pupils with talents or giftedness in the subject
 - schemes of work which include provision for these pupils
 - special programmes to complement mainstream provision
- a review of the principles underlying the organisation of pupils into teaching groups and a willingness to consider different forms of organisation
- effective monitoring of individuals and groups
- good links with other schools to develop joint projects, disseminate good practice and extend professional development.
- 109. In two-thirds of the schools visited the early stages of the programme were being well managed. Two key factors emerged. The first was the recognition that improving mainstream classroom practice is the key to success. The second was the involvement of senior staff in making sure that the initiative was integrated with existing structures and other improvement work in order to allocate resources and organise work intelligently.
- 110. In the more effective schools there were clear structures to develop, implement and monitor the initiative. The engagement of senior staff underpinned the work of the co-ordinators, many of whom do not hold senior positions. Definition of the responsibilities of the co-ordinator and middle managers, and how they linked, was an early and essential part of the process. Most of the schools still had some way to go in this regard. Lines of accountability and links with heads of departments or senior teachers were not sufficiently clear in them.
- 111. Shaping the initiative into coherent whole-school action and tracking its effects proved challenging for all schools, not least because many of the schools were involved in a range of other projects with separate funding streams, planning and monitoring systems and expected outcomes. In most schools connections between work on providing for the gifted and talented and other projects had not been thought through well enough.

- 112. Headteachers with a high level of awareness about the strengths and weaknesses of their schools were able to see how the initiative could fit into and enhance their existing strategies for raising standards. A climate of care and the provision of excellent support and guidance were seen as essential to the implementation of policies for gifted and talented pupils. Where these features were strong, personal tutors had a pivotal role in helping to ensure that support was marked out for those groups and individuals most at risk of underachievement.
- 113. If managing the connections between improving provision for the gifted and talented and other school work was a significant problem for many schools, so, for some of the schools visited, was teacher staffing. The effects were felt most sharply in the lack of priority given to the initiative in departments affected by a lack of specialist teachers. Non-specialist or short-term teachers are, understandably, rather less likely than others to contribute well to the assessment of high ability and to the development of mainstream teaching; they are also likely to be less capable of involvement in extra provision organised by the department.
- 114. All the schools had been able to appoint a co-ordinator of the school programme, although sometimes there had been a turnover since the beginning of it. The most effective co-ordinators had clearly been picked because of their skills in team-working and influencing and supporting colleagues. The funding of the initiative means that schools can budget for necessary non-contact time, particularly for school co-ordinators, although not all schools had done this. Where they had done so, it meant that work could be planned and developed outside the co-ordinator's other responsibilities.

115. In the best practice seen, co-ordinators:

- led the development of the school's policy for identifying gifted and talented pupils, linking it with policies on assessment, homework, examination entry and parental involvement
- supported departments in the revision of schemes of work, with particular reference to provision for gifted and talented pupils
- liaised with co-ordinators from other cluster schools to develop, implement and monitor complementary study programmes for these pupils
- worked with learning mentors to identify and address the needs of underachieving able pupils
- identified staff development needs and used the cluster group and network to help to meet them.

- 116. The least effective provision was associated with weak links between subject departments and the co-ordinator. In such cases there was no formal structure to secure subject leader involvement in developing and monitoring the initiative.
- 117. All lead co-ordinators in the Excellence in Cities partnerships have received well-defined training. However, training for co-ordinators at school level has been less systematic, with much reliance on learning on the job and informal support from the cluster. The visits underlined the desirability of extending co-ordinator training and developing specific training for subject teachers.
- 118. It was at the subject level that most schools needed particularly to work. Some departments had a clear picture of what they needed to do and of the help they needed. This included:
 - how to identify particular ability in the subject
 - how to plan enriched, extended or accelerated classroom programmes
 - how more innovative and challenging work can be incorporated routinely in classroom practice
 - how to ensure that supplementary out-of-hours provision complements and extends what happens in mainstream classes
 - what constitutes good progress for gifted and talented pupils over a given period of time and how it can be assessed.
- 119. In most schools, co-ordinators had run training sessions for staff and dissemination of good practice had begun through work in clusters. In one partnership, subject specialists from the cluster schools had met to identify issues with a view to providing guidelines to departments.
- 120. The Excellence in Cities guidance called for the setting up of clusters, typically of three to eight schools, within each partnership, with each cluster developing a network of partners, such as further education colleges, independent school, libraries and museums and sports clubs. A cluster has a lead teacher who co-ordinates the work and liaises with the network. Almost all school co-ordinators in the schools visited found this arrangement constructive. The support of the cluster and the associated network has been generally sound and often good, with teachers welcoming the opportunity for professional discussion, as well as the chance to work collaboratively. Pooling of experience was frequently cited as a positive factor in developing courses and joint provision.
- 121. Most of the schools visited had made little progress in refining monitoring and systems to take specific account of work with gifted and talented pupils. Some heads of department or faculties charged with monitoring the quality of provision for gifted and talented pupils in their subject areas were not well enough informed about what constitutes good specialist provision or about levels of expectation for these pupils.

- 122. In most of the schools visited, more rigorous interrogation and analysis of data were needed to identify trends, including which groups of pupils were most at risk of low attainment and in which subjects. In common with schools nationally, those visited collected information on pupils' achievements on entry and many were building up detailed individual profiles on pupils as they go through the school. However, this information was not generally being used systematically to set targets or to identify weaknesses in provision.
- 123. To improve target-setting, some schools were developing individual learning plans for pupils in the cohort. One of the questions to be decided was whether they should cover all subjects or only one or two subjects in which the pupil shows special ability. In one school individual learning plans were being developed with pupils, in discussion with their parents. Teachers believed that this would help ensure that pupils were actively contributing to their learning, were aware of their responsibilities and it would elicit the support of parents. The implications for planning and review were considerable and, at this early stage, the school was not clear whether the creation of individual learning plans, as envisaged originally, could be sustained.
- 124. Only in a very few schools were there signs of wider thinking about school policy on teaching groups, based on an articulation and examination of current principles. In other schools it was not always obvious to everyone what the principles behind pupil grouping were. Although movement of pupils from one group to another was quite common, as a result of assessment or for other reasons, evaluation of the impact of grouping arrangements on the attitude and attainment of groups and individuals had not usually been systematically undertaken. As a result the schools were not in a position to know that the looked-for benefits of the grouping arrangements actually emerged for example, in terms of distinctive goals being set and achieved for different groups, or that the teaching techniques and materials were consistent with the intentions behind the arrangement.

Other programmes

- 125. Successful provision in **masterclasses** depended on good communication, both at senior management level and by co-ordinators. In the case of the masterclasses for the talented, lines of communication were usually very effective. Changes in personnel hampered the progress of one scheme, and the project lost momentum. In general, not enough was done to work on the implications of the masterclasses for continuing provision in the schools involved.
- 126. In the masterclass programmes, assessment and monitoring were weaknesses. They needed to be more rigorous and to be used to affect planning. In one programme the primary and secondary partners were not in total agreement on

- identification procedures. In another programme, monitoring of progress faded after pupils moved into their secondary school.
- 127. A further problem related to inclusion. For example, access to masterclasses for pupils from comparatively disadvantaged families was limited by problems of transport.
- 128. The way in which **summer schools** were organised and managed varied. Where the arrangements were in the hands of schools, the presence of a co-ordinator, in one case a headteacher, from the school where the event was located, was very helpful. In one or two cases, late changes in management personnel put additional pressure on the co-ordinator, but this was usually handled well. Where LEAs made the provision centrally, the summer schools were usually effective. In one case, where an LEA co-ordinator had organised all three schools in a residential location and worked in partnership with teachers from local schools, the impact was outstanding.
- 129. Less effective management was evident where the teachers who were in charge did not know many of the pupils, and had had little time to prepare the programme. This was exacerbated in some cases where teachers had little or no previous training or experience in this work. Other co-ordinators had had little or no experience of partnership projects or of raising funds through sponsors. Nonetheless, funding was adequate and money sensibly spent.
- 130. The delegation of summer school management to agencies specialising in providing for the gifted and talented was effective and the agencies brought management expertise to the models they set up. Less effective were schools run on behalf of LEAs by providers with plenty of experience in summer schools and allied events but less assurance in the field of gifted and talented pupils. Many, but not all, LEAs' co-ordinators of provision for the gifted and talented were present for at least part of the summer schools in their area and their input was effective.
- 131. The monitoring of the progress of pupils in summer schools was very patchy. Some co-ordinators had been given incomplete information about the pupils, and others were unaware of the methods by which the pupils had been identified. In some schools, there were elements of testing to assess pupils' progress but many of the schools contained pupils from a wide number of primary or secondary schools. There was widespread uncertainty about how to ensure that information about progress made, skills acquired or newly identified would be fed back to the pupils' schools in a coherent and recognisable form. Examples of straightforward practice included reports on each pupil's progress sent to schools and meetings held in the autumn term between participants and co-ordinators to discuss what had been useful in the summer schools.

132. In all the schools visited in the **independent/maintained school partnership programmes** the initiative was managed smoothly. Their strength lay in the fact that the bids had been put together by schools, or clusters of schools with the help of an LEA. Success depended on two key factors: the wholehearted and active support of senior managers and the acknowledgement that what happens in the classroom is the critical test of value.

In one independent/maintained school partnership, the aim of the initiative was to improve motivation and achievement in languages especially amongst the boys in the maintained school. The independent partner had a particularly successful record with boys. It also had a sixth form, unlike most maintained schools in that LEA. The initiative enabled the sixth form language students to develop their language skills by acting as mentors for the maintained school's year 8 boys, while facilitating co-operative working for pupils in both schools in year 9 and 10. There was specific focus on raising the expectations and achievement of pupils with potential to achieve the highest grades in GCSE French and on reducing the difference in attainment between boys and girls.

133. Co-ordinators were either middle managers or deputy headteachers but their headteachers had usually been the driving force behind the scheme. Motives for the bids always included the desire to raise standards in particular subjects, such as MFL or performing arts, to enable pupils in their schools to have a wider choice in the sixth form or at GCSE, or to have access to facilities and resources not available at their own school. An additional objective sometimes was to extend opportunities for professional development.

One independent/maintained school partnership in the Midlands has seven partner schools, two independent and five maintained, working with faculties from the local university. The project connected with both an Education Action Zone and the Excellence in Cities partnership. The teaching focused on astrophysics, chemistry and social sciences. The aim was to extend academic work beyond the range of the National Curriculum by involving pupils in research projects led by the university. A further intention was to increase motivation and interest in scientific research. Each school was invited to nominate three pupils from their gifted and talented register for each course.

In all three courses, there was strong communication between the staff involved in the institutions. The key to successful management was good communication and well-defined co-operation. The astrophysics sessions, for example, all took place at the university. Research students helped school groups to explain to each other what they had found out about measuring galaxies. Considerable forward planning had been done by university staff to make it accessible but challenging for 14 year olds.

All three subjects evoked positive excitement from the pupils. Among the things they had most enjoyed were the interactive style of questionnaires, planning in chemistry developing ICT skills in physics and working with research students. Pupils emphasised that the most important thing they had learned was to speak out even when uncertain. They found the style of learning exciting and even liberating and particularly enjoyed meeting able pupils from other schools.

134. The approach to monitoring in the independent/maintained school partnerships varied. There was almost always on-going monitoring of academic progress based on attainment at Key Stage 3, GCSE or A level. Another useful feature was regular contact between partner schools, whether by using specifically allocated time or through e-mail, to check and evaluate the progress of the partnership. A third, less common, feature involved visits by senior staff and co-ordinators to lessons, music practice and other events to see how improvements were being effected.

Conclusions and recommendations

- 135. The grant-funded programmes covered by this survey have had clear value in increasing the additional provision made, often out-of-school hours, for pupils of high ability. Among the programmes, the Excellence in Cities strand for gifted and talented pupils is the largest; it is also the one which most directly encourages schools to examine and develop provision across the school on a sustained basis.
- 136. There are lessons to be learned from all the programmes. A number of issues emerging from them merit particular attention. They include:
 - improving methods for identifying gifted and talented pupils
 - engaging parents and pupils
 - developing subject-specific approaches
 - giving earlier attention to the skills of independent learning
 - making the most of additional provision
 - recognising the implications for staffing
 - improving monitoring
 - establishing a secure basis for improving mainstream school practice.

... improving methods for identifying gifted and talented pupils

- 137. All the schools visited have found ways to identify at least some of their most able pupils but most need to consider the process of identification in greater depth. In part this is a matter of the circumstances of the school. Joan Freeman's apt comment in *Educating the Very Able* on identification speaks of trying to 'provide multiple opportunities for discovery, not multiple hurdles'. For example, in schools where many pupils' language skills are under-developed methods of identification need to place more emphasis on non-verbal assessments. To take another example, schools with a high level of pupil mobility need to ensure that assessments are frequent enough to catch newcomers and that they do not rely on documentation of previous achievements which may be slow to arrive or simply not exist.
- 138. It can be especially difficult to recognise latent ability when pupils are apparently uninterested in showing it. Procedures need to look beyond such attitudes. This is especially important in programmes such as summer schools where participation is voluntary.
- 139. To ensure that the process of identification is not inadvertently disadvantaging some groups, schools need to make full use of their data, including by focusing on gender and ethnicity, to reveal which groups may be disproportionately represented. Identification of the gifted and talented is then more likely to be a tool for inclusion.

140. A proper emphasis on inclusiveness does not mean that the numbers involved need to be very large. In some schools involved in Excellence in Cities the guidance has been interpreted too loosely, so that they are trying to target too many pupils at any one time. This is likely to mean a dilution of the provision. If schools adopt the recommended policy of flexibility, under which pupils move into and out of the targeted group as their performance dictates, more pupils can be involved over time, while maintaining the focus and the distinctiveness of the provision.

... engaging parents and pupils

- 141. It was clear in the schools visited that, despite concerns among some about possible misunderstandings, teachers need to enlist the support of parents for their work with gifted and talented pupils if the provision for them is to be effective. Concerns about the reaction of parents whether their children are included or otherwise are not likely to be resolved by maintaining a discreet silence.
- 142. The same applies to pupils. Some schools have not explained the initiative clearly to the pupils involved but the pupils are nevertheless aware of something going on, even if they are not altogether clear what it is. Pupils need to understand the rationale behind the approach and its intended outcomes so that their active engagement and endeavour are fully enlisted.
- 143. In independent/maintained school partnerships and summer schools, many opportunities are available for pupils to present material or mount performances which illustrate the work they have done. Organisers should ensure that parents have as much opportunity as possible to share in these events and, where appropriate, to assist in their presentation.

... developing subject-specific approaches

- 144. Schools know that the Excellence in Cities initiative will stand or fall on how effectively it can influence what goes on day-to-day in classrooms, and the value of additional provision made through other programmes will only be maximised if it is matched by developments in the mainstream. Many schools have yet to work out fully how they can improve mainstream subject practice for high-ability pupils. Some LEAs have long experience of supporting teachers in this respect. Elsewhere, helped by the Excellence in Cities arrangements, opportunities are developing for teachers to see what other schools do and to share documentation. The most pressing need is for good information on what is effective in the practice of different subjects.
- 145. Most schools visited recognised the need to shape and refine existing schemes of work and to design additional programmes, but many teachers feel they need help in recognising what constitute challenging expectations for pupils of a given age within their subject and how they can organise work to match them. Lists of generic

high-level skills have their place but are often too broad to focus the planning of work in particular subjects. Detailed subject-specific guidance should help to define what constitutes pace, breadth and depth in the subject and to highlight the methods and resources imaginative classroom approaches entail.

- 146. Improving differentiation was an issue for attention in many of the schools visited. Most of the schools operated some form of setting, but in providing for high-ability pupils, the rationale for setting needs to be clear and the range of ability within sets should dictate the types of differentiation planned.
- 147. Departments also need to consider how to make coherent integrated provision within schemes of work so that out-of-hours courses, activities and classes can be planned to complement classroom provision.
- 148. On the evidence of the visits, guidance on sport and the creative arts would be particularly welcomed. Although there are national benchmarks in particular fields, such as instrumental music, these do not necessarily translate readily into what can be done in the classroom setting.

... giving earlier attention to developing the skills of independent learning

149. Most of the schools visited run revision or other study support classes for pupils at Key Stage 4. However, it is clear that in most schools a greater emphasis is needed on developing pupils' capacity to work independently at an earlier stage. For some pupils with latent high ability but a large gap to bridge between that potential and their performance, this means a radical approach to improving basic skills.

... recognising the implications for staffing

- 150. For many schools serving inner-city areas in particular, problems with teacher staffing have hampered progress in improving provision for the gifted and talented. The problems make assessment more difficult and, crucially, they reduce the capacity of departments to devise and secure changes in classroom practice. Non-specialist cover, including cover provided by temporary staff, does nothing to promote well-structured and imaginative teaching. It also reduces the pool of teachers with interest and expertise in arranging additional provision out-of-hours a process demanding of energy, time and good will.
- 151. There are limits to what schools can do to mitigate these problems. Their existence underlines the desirability of providing clear and direct guidance at the subject level of the kind of which inexperienced and non-specialist teachers can use. They also point to the need for LEA and school arrangements on the recruitment and support of teachers to reflect the need to maintain the momentum which initiatives on provision for the gifted and talented are creating.

... making the best of additional provision

- 152. Programmes such as summer schools and masterclasses can offer stimulating and highly enjoyable experiences for those involved teachers as well as pupils. At their best they can draw schools together and promote lively development across them. Close attention and adequate time needs to be given to their planning and evaluation if they are to be cost-effective and of real consequence and subsequent value to the schools involved. Their funding needs to be secure enough to allow for continuity and development over time.
- 153. Increased contact with the local community helps to map provision, for example, for sport, drama, music and dance, so that schools can identify those pupils participating. It can also help to form links with other providers and to shape additional school provision to complement or support local work. Long-established supplementary schools are a good example of such community-based additional provision which regularly supports pupils in academic and sometimes creative subjects.

... improving monitoring

- 154. Most schools visited in this survey have not yet developed effective systems to monitor the additional improvement the programmes are intended to promote. Senior managers need to interpret data on attainment and behaviour to find out which groups of pupils are successful and in which departments. Close monitoring helps to explain what works, and why, in a particular school. It helps to highlight when, and in which subjects, pupils fail to thrive. Rigorous evaluation assists senior staff and teachers to plan more precisely for improvement, to target resources more effectively and to increase understanding of what works and the confidence to try it.
- 155. Initiatives such as gifted and talented summer schools and masterclasses involving more than one school place particular demands on co-ordinators in ensuring that information about pupils' performance, potential and progress is disseminated appropriately. This is often difficult when the participating pupils come from a large number of schools with which the co-ordinators may have limited links. A simple system is needed to ensure that pupils' achievements in summer schools and masterclasses and similar programmes are transmitted to the pupils' home schools.

... establishing a secure basis for improving mainstream school practice

156. This is the key task for many schools. There is much that remains to be done in this respect in Excellence in Cities areas – and, as OFSTED inspections indicate, outside those areas – if more high-ability pupils are to make good progress.

- 157. There is a risk that specially funded work to improve provision for the gifted and talented develops a life of its own and is not sufficiently connected with the main structures, systems and developments in the school. The involvement of heads of departments in secondary schools is crucial to successful work. Schools need to ensure that lines of responsibility are explicit and understood. School plans should identify practical strategies, economically based on existing arrangements, for what subject departments will do about the identification of high-ability pupils, the setting of targets, the organisation of groups, schemes of work, out-of-hours activities and monitoring and evaluation. They also need to make sure that the school's systems of pupil support and guidance are properly engaged.
- 158. By way of summary, the evidence from the visits made for this survey and from inspections of effective schools elsewhere indicates that an effective school approach to improving provision for gifted and talented pupils includes these features:
 - developing an ethos where academic and creative achievement is expected and celebrated
 - being open with parents and pupils about what the school is trying to do in this regard and actively enlisting their support and involvement
 - adopting a management structure which involves all departments and ensures sufficient authority for a co-ordinator to work effectively with senior staff to influence classroom practice
 - careful analysis of data on pupil performance and of pupils' approaches to learning in subjects as a basis for effective identification
 - work on developing assessment within subjects so that teachers become more adept at recognising latent high ability
 - active strategies to ensure equality of opportunity, most especially where pupil mobility is high and for those pupils reluctant to engage
 - a flexible attitude to the composition of the groups targeted, recognising that pupils' abilities are not static
 - professional development that increases teachers' confidence and capability in designing classroom practice with gifted and talented pupils in mind
 - working early on the skills of independent learning
 - involving pupils directly in evaluating their own progress and contributing to their future targets
 - working with local schools and community organisers to improve area-wide provision and to share expertise
 - systematic monitoring as a basis for evaluating the effectiveness of the provision made.

