

**FINAL REPORT**

February 2003



# Preparing for Change:

## Evaluation of the Implementation of the Key Stage 3 Strategy Pilot

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We would like to thank Peter Cuttance and Tony Mackay, our colleagues from the University of Melbourne, for their support, insights and feedback, and for bringing a comparative international perspective to the evaluation. We are also extremely grateful to all of the schools and LEAs who were willing to participate in evaluation activities, in particular those in the 12 case study schools and 6 case study LEAs who gave precious time so generously.

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# Executive Summary

The Key Stage 3 (KS3) Strategy addresses concerns raised by the uneven progress of pupils in the middle years of schooling found in this country and elsewhere. While these same concerns have been raised in other countries, the KS3 Strategy represents one of the most complex and ambitious approaches to improving teaching and learning and increasing pupil engagement. The Strategy has drawn on some international findings about education in the middle years, educational reform more generally and the implementation of change.

The purpose of this evaluation is to report on the impact and effectiveness of the KS3 Pilot and to draw out lessons for the national roll-out of the KS3 Strategy and for future pilots. The evaluation was conducted by a team from the University of Bath and the University of London Institute of Education.

## Methodology

The remit of the evaluation was to study the implementation of the Pilot strategy in LEAs and schools with different capacity to bring about change. This evaluation complemented the KS3 national team's own monitoring programme, which sought schools' feedback on training and materials, and the rolling programme of Ofsted visits, which focused on classroom teaching.

The evaluation, which ran from July 2001 to July 2002, began with discussions with policy makers and members of the national professional team, and a series of visits to 16 pilot schools in 13 LEAs. These visits were intended to develop understanding of the implementation of the Pilot from the perspectives of different stakeholders involved.

The findings from these visits provided the basis for a series of surveys of KS3 pilot school strategy managers; LEA staff involved in the KS3 Pilot; KS3 teachers in pilot schools; and Year 8 pupils in both pilot and non-pilot schools.

These surveys were accompanied by a series of intensive case studies in two schools in each of six representative LEAs, and in the six LEAs. The evaluation team conducted over 200 interviews and observed a range of training, INSET days, briefings, network meetings and consultants working in schools.

In addition, we conducted detailed statistical analyses of Year 7 pupils' attainments in progress and optional tests in English and mathematics to assist in evaluating impact.

## Main Findings

### Changing teaching and learning

The focus on teaching and learning was welcomed by most schools we visited as something likely to generate long-term improvement gains, as it directly affects what happens in the classroom. Schools had different reasons for getting involved in changes that will affect teaching and learning. Within different schools, some teachers were keener than others on being involved in the Pilot, and individual capacity affected how teachers approached change. Motivation to expend the effort to change practice appeared to be a key factor of successful implementation. Confidence also affected teachers' perceptions of how flexible Pilot approaches were and their freedom to adapt them to suit their practice. Some had a stronger initial skill base which made it easier to incorporate changes. Some schools and departments had greater capacity to support teachers in changing their practice. Change in teachers' practice was influenced by time, the language used, competing initiatives, workload and dealing with behaviour issues. We found some evidence of raised expectations, extended teaching repertoires, greater reflection, and increased staff discussion about teaching and learning. At this relatively early stage of implementation, our evidence suggests that many teachers were trying out new practices on an incremental basis ('tweaking') rather than radically changing practice.

## Supporting change

We found that the basic infrastructure for implementing the Pilot was in place in schools and LEAs. Schools welcomed the financial investment supporting the Pilot and found most of the materials to be high quality teaching and learning resources. They appreciated the improvements made as a response to feedback. The training to promote changes in teaching and learning was generally found useful, particularly the work of consultants with teachers in their schools.

There were problems with teacher release that adversely affected some schools, and with time and skills for cascading training. Consequently, some teachers had extremely limited experience and understanding of the Pilot Strategy. The strongest support teachers felt they received within school was from departmental colleagues, although this was constrained by time.

Coaching was being used to positive effect in some schools and LEAs. Wider networking has potential that was not fully realised during the Pilot. Some LEAs developed a closer relationship with schools than others. Consultants were generally well supported by their LEAs and regional directors to carry out their role.

## Leading and managing change

Headteachers' and school leadership teams' commitment to the Pilot and Strategy was an important factor in successful implementation, while leaders of individual strands played a vital role in the success or otherwise of their strands. We also found that LEAs had a key leadership, management and mediating role that most fulfilled well. Managing a growing Pilot, with strands added each year, was a particular challenge for school strategy managers and headteachers.

We observed new patterns of leadership emerging out of the Pilot, often involving enthusiastic but less experienced teachers. Sometimes these were very effective; at other times they were affected by conflicts within departments.

Staff shortages and changes created difficulties for the leadership and management of change, as well as potential sustainability.

## Making connections

Many schools struggled initially in trying to connect the 'big picture' for whole-school improvement, particularly with the phased introduction of the strands. Some appeared to do this more successfully than others. Some LEAs played a key role in supporting this. Implementation appeared more successful when schools were clear in their own priorities and found ways to connect the Pilot with them. Schools and LEAs used a variety of mechanisms to link KS3 to other initiatives. More successful ones took a co-ordinated strategic approach.

Schools and LEAs worked hard to promote progression. Some devised creative strategies for KS2-KS3 links, but there appeared to be only limited improvement in the systematic sharing of professional knowledge across the key stages in some schools and in the transfer of pupil data from primary to secondary schools. As a staged approach was taken, focusing most Pilot activities initially on Year 7, the full story of progression throughout KS3 is unlikely to be clear until pupils in pilot schools have experienced three years of the Pilot and Strategy.

## Engaging pupils and assessing their learning

From our survey work with Year 8 pupils we found they recognised the importance of school and were generally positive about their own commitment and learning. Year 8 pupils felt their learning was helped by clear objectives, enjoyable and active lessons, and group work. We also identified substantial gender differences in attitudes to school and learning, and differences related to schools' achievements and capacity.

The similarity of response from pupils in pilot and non-pilot schools suggests that the Pilot had not yet impacted on pupils' underlying attitudes to school and learning, though teachers in the Pilot were beginning to see positive pupil responses to the teaching and learning strategies. The 2001 progress tests suggested only limited improvement for pupils entering at level 3, though there were concerns about the validity of these tests. The 2001 optional tests showed wide variability in improvement for Year 7 pupils at level 4 and above, with positive outcomes in mathematics.

## Differentiation in implementation and impact

Though the Strategy is geared to meet the needs of a wide range of pupils, it had made additional provision for the needs of lower attaining pupils. While teachers' expectations for these pupils, particularly in less advantaged schools, appear to have increased, managing provision for lower attaining pupils (e.g. catch-up) raised particular issues for more disadvantaged schools.

When schools were grouped by social background or achievement, there were few other common patterns of response across similar schools. There were mixed views on how well the Pilot addressed the needs of high achieving schools and pupils.

Initially there were differing responses to the different strands. Teaching and Learning in the Foundation Subjects (TLF), mathematics and Literacy Across the Curriculum (LAC) were generally well received by most schools, with a consequent positive effect on implementation.

## Main Successes

The main aims of the Pilot Strategy were to raise standards and improve teaching and learning at KS3. The key principles of the Pilot Strategy were: improving progression from KS2 to KS3; raising expectations of both teachers and pupils; increasing engagement of pupils; and transforming teaching and learning. Some of the most successful features of this pilot have been:

- raising the profile of KS3 in schools and LEAs;
- focusing on teaching and learning, which has engaged teachers and extended teaching repertoires;
- raising expectations, especially for lower attaining pupils;
- indications of positive reactions from pupils;
- investing in support for schools and teachers, particularly through the work of KS3 consultants in schools;
- the national team's willingness to respond rapidly to feedback from schools; and
- pilot schools' and LEAs' commitment to working through complex change issues.

## Key Issues

Efforts to bring about change inevitably face difficulties. We identified eight issues that created challenges for pilot schools and LEAs. They were:

- system-wide constraints, such as teacher shortages and workload, affecting schools' implementation of the Pilot;
- finding time to plan and introduce change and to reflect on and develop new practices – for many the major obstacle to effective implementation;
- how to move from superficial change to deeper embedding of new teaching and learning approaches;
- schools seeing 'the big picture' and making connections across the strands in order to make this a teaching and learning initiative for whole-school improvement rather than a subject-specific one;
- a 'cascade' model of dissemination often affected by limited opportunities, particularly within schools, to inform and support teachers who had not been on the LEA training;
- while elements of the Pilot matched some of the pupils' own perceptions of their learning needs, other learning needs identified by them may have received only limited attention at this stage;
- limited emphasis at this stage on monitoring pupil engagement and only a narrow range of indicators being used to assess attainment on Pilot teaching and learning approaches; and
- schools' responses to the Pilot reflecting differences in school circumstances and capacity, which highlighted that pilots need to be differentiated and flexible.

## Implications

Implementation appears to be progressing well, particularly for those in leadership roles most closely involved in the training and other Pilot activities. Some schools were using the Strategy as a mechanism for whole-school improvement. Others were taking a less co-ordinated approach. Some were still at an early stage of implementing some strands. From the experience of the Pilot we would want to draw out implications for furthering implementation, sustainability, national roll-out and, more generally, for the implementation of other initiatives, and possibilities for future development of KS3.

## Deepening implementation

Furthering implementation is likely to be influenced by:

- sufficient time to cascade training through to all teachers and develop practices;
- continued investment in support for strand leadership, school strategy leadership and management and ensuring senior leadership commitment;
- continued support from consultants;
- differentiating support to meet specific needs of schools, departments and teachers;
- flexible training schedules;
- ongoing support for consultants in the skills of support and challenge;
- continuing to develop KS2-KS3 transition activities;
- drawing on what pupils have to say about their learning to build new teaching and learning approaches;
- helping schools and LEAs make connections between all the initiatives in which they are involved;
- finding a range of different ways to evaluate the success of the Pilot and Strategy; and
- paying attention to the system constraints that inhibit implementation.

## Building capacity for sustainability

A key issue for the KS3 Strategy is whether changes, once implemented, will be sustainable. Capacity building, in relation to the KS3 Strategy, occurs at four levels: individual, department, school and LEA support.

- **Building individual capacity:** in addition to the activities described under deepening implementation, coaching appears to have considerable potential for embedding and deepening practices, particularly if teachers select their own focus for observation. Use of videoing techniques may help support coaching.
- **Building department capacity:** department capacity was an influential factor in the implementation of the Pilot. It is likely to be strengthened by attention to subject leadership development and greater use of team learning approaches where teachers can develop shared understandings to create new knowledge about their practice.

- **Building school capacity:** school capacity has had an important influence on the success of schools' implementation efforts. A potentially valuable avenue to explore in building school capacity is the role of professional learning communities. Evidence suggests that their emphasis on a shared learning vision, collective responsibility for pupils' progress, collaborative inquiry on professional practice and group learning may have a positive impact on school improvement. Changing organisational structures that inhibit opportunities for teachers to work together and develop their practice is also likely to enhance school capacity.
- **Building LEA support capacity:** LEAs have different strengths and needs in relation to being able to provide appropriate support to schools to sustain the KS3 Strategy. Capacity building is likely to be enhanced by expanding the team involved in KS3 support through making stronger links between Strategy support roles and other LEA support and challenge roles, as well as innovative hiring practices. Networking opportunities might also be further developed, as well as additional ways of helping schools become (more) inquiry minded by taking a questioning approach to their work, collecting and using data wisely, and engaging in action research.

## Broadening the KS3 Pilot to the National Strategy

What it takes to 'roll out' or 'scale up' reforms can be different from what is needed in pilots. Our evaluation suggests that the following will be important for the KS3 Strategy national roll-out as well as for other Government national programmes.

- Maintaining the focus on teaching and learning because this is what has captured people's imagination and generated enthusiasm.
- Ensuring that schools can see the 'big picture' as soon as possible. This is sometimes difficult because strategies evolve and feedback can change some of the original ideas. Nonetheless, helping people see the whole vision is important.
- Drawing on the experience of pilot schools because they have useful ideas to share, have been through many of the issues, and have been involved for longer so can provide useful pointers about change over time.

- Circulating capacity around the system is a side effect of this Pilot Strategy. As people develop new skills and confidence, they often choose to move on for promotions elsewhere. This can be valuable in building the entire system's capacity but, certainly in the short term, it can have negative consequences for the schools and LEAs these people have left. This is why building capacity at all levels is critical.
- Recognising the special nature of pilots, especially if pilot schools are volunteers and receive extra funding or preferential treatment.
- Evaluating the implementation of the roll-out and impact of the Strategy because its lessons will be valuable to feed in to other reform efforts in this country as well as internationally.

## Where next for KS3?

International literature highlights that in an increasingly complex global society, a more diverse range of learning outcomes will be required for educated citizens. Research also suggests that pupil progress levels off after a few years of 'doing the same thing' and that education for the middle years may need more radical changes to take account of different ways of learning, the nature of adolescence and tie learning more closely to real life. Eight 'strategic intentions' for middle years reform are offered for future consideration in further developing KS3. These are drawn from international reform efforts.

- Securing the curriculum essentials, reflecting aims specific to this phase of schooling, adolescence and global changes.
- Managing the transitions, emphasising a learner-centred, rather than curriculum-centred, approach.
- Creating a new model of provision, with smaller learning communities within schools.
- Transforming teaching and learning, including the use of new information technologies.
- Creating outward-looking learning communities, by securing families' support for learning at this stage and involving the wider community.
- Tooling up for reform, through initial teacher education as well as continuing professional development and informal learning opportunities.
- Building in time for developing professional knowledge.
- Assessing what is valued, to ensure schooling makes a difference to the range of desirable learning outcomes.



# Chapter 1: Introduction

## 1.1 Reforming the Middle Years

Reform of the middle years of schooling has become a matter of concern in many countries. The challenge of transforming schools to meet early adolescents' needs necessitates developing new teaching methods and enhancing learning environments to engage and excite pupils, challenge them and relate to the issues they regard as meaningful and important. In his speech to the North of England Conference on 6 January 2000, David Blunkett, then Secretary of State for Education and Employment noted how: "The success at primary level in the last two years has brought into sharp focus the unacceptable lack of progress from age 11 to 14". This was echoed by Estelle Morris, his successor, who described "our determination to tackle one of the long-neglected and toughest challenges facing schools: the middle years between 11 and 14".<sup>1</sup>

## 1.2 The KS3 Strategy and Pilot

The KS3 Strategy has been designed in response to these challenges. A complex and ambitious Government initiative, its intention is to transform education for 11 to 14 year olds. Based on four key principles – expectations, progression, engagement, and transformation – it involves five main strands: English (including Literacy Across the Curriculum), mathematics (including Numeracy Across the Curriculum), science, information and communications technology (ICT), and teaching and learning in the foundation subjects (TLF)<sup>2</sup>. A two-year phased Pilot, involving 205 schools in 17 LEAs, was set up to trial the Strategy's programmes and materials as well as the model of dissemination<sup>3</sup>. A range of centrally-driven mechanisms were put in place to support and challenge schools and LEAs. Each strand was piloted for one year before being rolled out nationally.

## 1.3 Structure of the Report

The remit of this evaluation was to assess the effectiveness of the implementation of the KS3 Pilot and to raise implications for the roll-out of the National Strategy.

The evaluation was based on a series of research questions and used capacity as an organising concept. The evaluation framework and questions are described, with our methodology, in the next two sections.

Central to this report are the findings of the evaluation, the successes and the issues they raise for those involved, and the implications of the findings, successes and issues. To set the findings in context, we first review the international literature on reform of the middle years and educational reform more generally, and then describe the Pilot as intended by the policy makers and national professional team responsible for its design.

The presentation of the findings is organised around six main themes that emerged from the evaluation. Throughout, the findings are illustrated by boxed summaries and vignettes from case studies of schools and LEAs.

### Six themes emerging from the evaluation

- Changing teaching and learning
- Supporting change
- Leading and managing change
- Making connections
- Engaging pupils and assessing their learning
- Differentiation in implementation and impact

1 Demos (2002) Transforming Secondary Education: the Middle Years. A speech by the Rt Hon Estelle Morris MP Secretary of State for Education and Skills. 21 March 2002. London: Demos and DFES.

2 This strand was renamed the Foundation Subjects strand after the Pilot.

3 The Pilot of the ICT strand was smaller, involving 40 schools in five LEAs.

Successes and issues of the KS3 Pilot are then discussed. The report concludes with a section providing answers to our research questions that:

- considers the extent to which implementation has occurred;
- draws out implications for further implementation, sustainability, and the national roll-out; and
- explores areas for possible future development of the KS3 Strategy.



# Chapter 2: The Context for Middle Years Reform: A Review of International Literature

The KS3 Pilot and its follow-on National Strategy represent a significant reform of the middle years of schooling across a whole country. While there are no direct parallels of this in terms of scale, there is considerable international evidence about middle years education and on large-scale reform. As the Strategy itself is forging new ground, its overall evaluation will make an important contribution to the understanding of large-scale reform of education for the middle years. This review does not attempt to be exhaustive but aims to capture key findings from international literature on the middle years and the implementation of large-scale reform.

## 2.1 Reforming the Middle Years of Schooling

There have been longstanding concerns about the academic progress and social development of pupils in the middle years. As one American review concluded: "national and international studies attest to the intellectual underdevelopment of too many young adolescents"<sup>4</sup>. Studies of transition and the middle years demonstrate a dip in performance during the period of schooling from around Year 5 to Year 8<sup>5</sup> (age 10-13), especially after transfer from primary to secondary school<sup>6</sup>. The hiatus in academic progress is particularly heightened after secondary transfer: it is estimated that up to two of every five pupils is not

making the expected progress during the year immediately after they have transferred school<sup>7</sup>. Furthermore, while pupils are more motivated immediately after transfer, motivation declines during Year 7. A worrying number have been found to be bored<sup>8</sup>, and in danger of becoming disaffected or even 'the disappeared'<sup>9</sup>. The rate of permanent exclusions in England also escalates rapidly during this period, reaching its peak in Years 8 and 9<sup>10</sup>.

### The middle years

The middle years of schooling are of critical importance in pupils' lives and educational progress. They are also a time of considerable, and sometimes dramatic, changes for young adolescents. The nature of learning in these years is complicated because during this phase, young adolescents experience several 'rites of passage'<sup>11</sup>:

- going through the profound changes in puberty;
- moving from family orientation to identification with a peer group;
- transferring from one school to another;
- developing their own values; and
- beginning to make independent personal and educational decisions with a long-lasting impact on their lives.

4 Lipsitz, J., Jackson, A.W. and Meyer Austin, L. (1997) What works in middle years reform? *Phi Delta Kappan*, 78 (7):517.  
 5 Hill P. W. and Russell V. J. (1999) Systematic, Whole-school Reform of the Middle Years of Schooling, in R. J. Bosker, B. P. M. Creemers and S. Stringfield (eds) *Enhancing Educational Excellence, Equity and Efficiency: Evidence from Evaluations of Systems and Schools in Change* Dordrecht: Kluwer.  
 6 Hargreaves, L. and Galton, M. (2002) *Moving from the Primary Classroom: 20 Years On*. London: RoutledgeFalmer; Anderson, L., Jacobs, J., Schramm, S. and Splittergerber, E. (2000) School transitions: beginning of the end or a new beginning? *International Journal of Educational Research* 33 (4):325-339.  
 7 Galton, M., Gray, J. and Rudduck, J. (1999) *The Impact of School Transitions and Transfers on Pupil Progress and Attainment* DfEE Research Report 131. Nottingham: DfEE Publications.  
 8 Hargreaves, A., Earl, L. and Ryan, J. (1996) *Schooling for Change: Reinventing Education for Early Adolescents* London: Falmer Press; Rudduck, J., Chaplain, R., and Wallace, G. (1996) *School Improvement: What Can Pupils Tell Us?* London: David Fulton; McCall, J., Smith, J., Stoll, L., Thomas, S., Sammons, P., MacBeath, J., Boyd, B. and MacGilchrist, B. (2001) *Views of Pupils, Parents and Teachers: Vital Indicators of Effectiveness and for Improvement*, in J. MacBeath and P. Mortimore (eds) *Improving School Effectiveness* Buckingham: Open University Press.  
 9 Barber, M. (1996) *The Learning Game: Arguments for an Educational Revolution* London: Victor Gollancz.  
 10 DfES (2001) *Statistics of Education: Permanent Exclusions from Maintained Schools in England* National Statistics Bulletin 10/01. London: HMSO.  
 11 Hargreaves, A., Earl, L. and Ryan, J. (1996) op. cit.; Measor, L. and Woods, P. (1984) *Changing Schools* Milton Keynes: Open University Press.

Young adolescents experience significant changes and differences in learning contexts and environments during the middle years of schooling, especially those moving from primary to secondary school. For a significant number, the effects of transition are negative<sup>12</sup> due to:

- difficulty in adjusting to the new environment, separation from friends, loneliness and concerns about bullying;
- uncertainty about managing their learning across a wide range of subjects, and managing work time in and after school; and
- facing different teacher expectations between primary and secondary teachers, repeating work already done, and dealing with differences in teacher beliefs about learning and teaching.

## Learning in the middle years

Many pupils look forward to the new experience of secondary with high expectations, but after the first months the excitement quickly falls off. The Australian Alienation During the Middle Years of Schooling Study, focusing on the first years of secondary school, showed that during these years young people started being bored and put off by school: they liked coming to school to meet their friends and have fun, but not to learn. The study further demonstrated that this behaviour, which teachers called alienating – the ‘mucking around’; ‘playing up’ in classes, challenging teachers, growing absenteeism – was more often based on a growing boredom and disenchantment with learning during Year 7<sup>13</sup>.

Young adolescents experience significant changes and differences in learning contexts and environments during the middle years of schooling as they move from primary to secondary schools. In primary school children have a closer relationship with one teacher. The nature of learning in secondary school is more varied because a greater number of teachers are involved in each pupil's learning. The picture, however, has been shown to be more complex because of the range of teaching in both phases. For example, one study found that some pupils whose KS2 teachers had helped them develop personal autonomy in their learning were faced with didactic teaching at KS3 – note taking, pupil silence and teacher talk. Other

pupils, entering the same secondary school but bringing a background of didactic teaching and passive learning from KS2, found themselves with some new teachers who gave them considerable personal responsibility for learning and ran highly participative and active classes<sup>14</sup>.

Results of the Making Your Way through Secondary School Study<sup>15</sup>, based on pupils' perspectives, show that learning in the middle years is considered more interesting and engaging when:

- lessons have more practical work and activities;
- work is at appropriate level of difficulty (not too hard, not too easy);
- adolescents are not asked to do many things at once, like copying notes from board while listening to teachers;
- pupils have a sense of progress and growing control over their learning; and
- learning validates and extends pupils' personal experiences and identification.

Despite this, it has been argued that the current conditions of learning across middle years do not appear adequately to take account of the social maturity of these young people. Nor do they sufficiently acknowledge the tension and the pressures young adolescents feel as they struggle to reconcile the demands of their social and personal lives with the development of their identity as learners<sup>16</sup>. From their interviews with young people in the early years of secondary school, Rudduck and colleagues suggest that these pupils report that respect, fairness, autonomy, intellectual challenge, social support – both academic and emotional – and physical and emotional security make a significant difference to their learning.

## Attempts at reforming the middle years

Reform of middle years schooling offers particular challenges. Reviews of the literature, however, conclude that fundamental changes to the structure and content of middle years education can lead to substantial improvement in both pupils' academic achievement and their healthy development<sup>17</sup>. Arising from their study of middle years reform in Ontario, Canada, Hargreaves and colleagues (1996) argue that the challenge of transforming

12 For summary, see Hargreaves, L. and Galton, M. (2002) op cit.

13 Australian Curriculum Studies Association (1996) From Alienation to Engagement: Opportunities for Reform in the Middle Years of Schooling. ACSA: Canberra.

14 Nicholls, G. and Gardner, J. (1999) Pupils in Transition: Moving Between Key Stages. London: Routledge.

15 Wallace, G. (1996) Engaging with Learning, in J. Rudduck, R. Chaplain and G. Wallace (eds) School Improvement: What Can Pupils Tell Us? London: David Fulton.

16 Rudduck, J., Chaplain, R. and Wallace, G. (1996) op cit.

17 Lipsitz, J., Jackson, A. W. and Meyer Austin, L. (1997) op cit.

schools to meet early adolescents' needs necessitates capitalising on new teaching methods and learning environments built on what is known about human learning and development<sup>18</sup>. In this way, they suggest, it will engage and excite pupils personally, challenge them and relate to issues young people regard as meaningful and important. Hill and Russell (1999)<sup>19</sup> note that this implies a need for a view of learning where pupils are more involved in constructing meaning and using co-operative learning strategies to tap into the positive potential of peer group influences. Changing middle years practice has, however, proved complex. Despite, for example, recommendations of an American Task Force on Education of Young Adolescents (1989)<sup>20</sup>, a few years later, few schools had implemented many of the practices recommended, "and even fewer have implemented them well"<sup>21</sup>. It has been argued that structural changes alone – for example, lengthening lesson periods and creating teacher teams – without linking these to changes to teaching and learning, have little impact on pupils' learning and attitudes<sup>22</sup>.

## Designs for reforming middle years schooling

Internationally, there has been a move towards whole school improvement 'design' approaches<sup>23</sup>. These are deliberate attempts, based on research evidence, to transform schooling by identifying the critical elements of schools and school systems, and working on those aspects that need to change for them to operate effectively and in alignment with all the other elements. A design informing the Middle Years Research and Development (MYRAD) Project in the state of Victoria, Australia has nine interconnected and interdependent elements<sup>24</sup>:

- beliefs and understanding teachers have about their professional efficacy and about pupils' capability for learning;
- standards and targets providing explicit goals and expectations for pupils and teachers to meet;
- monitoring and assessment including assessment for learning, to ensure pupil progress;

- classroom teaching strategies because the greatest school contribution to pupils' achievement is made in classrooms<sup>25</sup>;
- professional learning teams with effective ongoing and practical professional learning opportunities, including those within school, working as multidisciplinary teams pursuing specific pupil learning outcomes;
- school and class organisation including attention to timetabling, class size, discipline, and relationships with pupils;
- intervention and special assistance for pupils who fail to make progress;
- home/school/community links through regular informative reporting, communication, building external partnerships, and links between secondary schools and their feeder primary schools; and
- leadership and co-ordination with consistent and continuing support for middle years initiatives, creating a culture of and supporting structures for learning.

## 2.2 Large-scale External Reform

More generally, in the last few years there has been a resurgence in large-scale reform<sup>26</sup> but it is large-scale reform with a difference. In the late 1980s and through much of the 1990s, many systems around the world engaged in restructuring activities as means to raise standards of achievement. These included a variety of forms of decentralisation, with increased control of decision-making and finances passed down to schools<sup>27</sup>, although in some countries, this was balanced by greater central control of curriculum and accountability. Mechanisms were also put in place in various countries to increase parental choice. In some jurisdictions, restructuring efforts included attention to more recent theories of learning and their implications for teaching. While many innovative ideas about teaching and learning were promoted, their impact did not spread beyond a limited number of schools: 'pockets of excellence'<sup>28</sup>. More recent reform efforts, while continuing

18 Hargreaves, A., Earl, L. and Ryan, J. (1996) op cit.

19 Hill, P.W. and Russell, V.J. (1999) op cit.

20 Task Force on Education of Young Adolescents (1989) *Turning Points: Preparing America's Youth for the 21st Century*. New York: Carnegie Council on Adolescent Development.

21 Mac Iver, D. J. and Epstein, J. L. (1993) Middle grades research: not yet mature but no longer a child, *Elementary School Journal* 93, 530.

22 Cuban, L. (1992) What happens to reforms that last: the case of the junior high school, *American Educational Research Journal* 29, 227-52.

23 See, for example, Stringfield, S., Ross, S. and Smith, L. (1996) *Bold Plans for Restructuring: New American School Designs*. New Jersey, Lawrence Erlbaum Associates.

24 Hill, P.W. and Russell, V.J. (1999) op cit, based on Hill, P.W. and Crévola, C. (1997) *The Literacy Challenge in Australian Primary Schools* IARTV Seminar Series No 69. Jolimont, Australia: IARTV.

25 Scheerens, J. and Bosker, R. (1997) *The Foundations of Educational Effectiveness*. Oxford: Pergamon. Sammons, P. (1999) *School Effectiveness: Coming of Age in the Twenty-First Century*. Lisse, the Netherlands: Swets & Zeitlinger.

26 Fullan, M. (2000) The return of large-scale reform, *Journal of Educational Change*, 1 (1): 5-28.

27 Karstanje, P. (1999) Developments in School Management From a European Perspective, in R. Bolam and F. van Wieringen (eds) *Research on Educational Management in Europe*. Munster, NY: Waxmann.

28 Elmore, R. (1996) Getting to scale with good educational practice, *Harvard Educational Review*, 66: 1-26.

to focus on governance and accountability mechanisms, performance, curriculum frameworks and materials, have recognised that focusing on engaging and challenging approaches to teaching and learning is critical. Related to this has come a recognition that teacher learning is at the heart of change, leading to a corresponding focus on professional development<sup>29</sup>.

There is now increasing awareness that if educational reform is to make a difference to all pupils and across education systems, three issues are fundamental<sup>30</sup>:

- depth– the reform has to be able to improve important aspects of pupils’ learning;
- breadth– it has to be extended beyond a few schools; and
- length– it needs to be sustained over a long period which, other research suggests, includes a need for connectedness – the reform has to operate together in an integrated manner with other reforms<sup>31</sup>, to create coherence<sup>32</sup> for greater impact.

## The implementation of change

Implementation is a critical feature of all reform efforts. Fullan (2001)<sup>33</sup> describes implementation as:

**The process of putting into practice an idea, program, or set of activities and structures new to the people attempting or expected to change . . . the means of accomplishing desired objectives . . .**

## What affects implementation?

Three broad factors interact with each other and affect implementation<sup>34</sup>:

- 1 The reform itself.
- 2 Capacity of those implementing the reform.
- 3 External factors affecting both the reform and implementers’ capacity.

## The reform itself

Implementation proceeds more smoothly when those in a school see a need for the change: in other words, there is a good ‘fit’ between the reform and the school. Clarity of the reform is also important, so that there is no room for misinterpretation, although some level of flexibility to adapt the reform to individual contexts is necessary to create ownership<sup>35</sup>. Getting the right level of complexity has also been found to be important: while simple changes are easy to make, they may make little difference, but more complex changes are more prone to failure. Finally, the quality and practicality of the reform programme is important.

It is generally agreed that support is essential for implementation<sup>36</sup>. On the basis of studying nearly 20 multi-year, multi-site large-scale reform efforts over 15 years, Stringfield (2002)<sup>37</sup> concludes:

**Reform requires more resources over a longer period of time than either design teams or local educators realize . . . Support for reform must be a permanent feature in most contexts.**

In particular, notions of what constitutes effective professional development and professional learning are changing, with less emphasis on short-term external training and more on school-based approaches to professional learning, involving teachers studying and researching their own practice<sup>38</sup>, coaching each other<sup>39</sup> and working collectively to sharpen teaching practices<sup>40</sup>.

A major American study of educational change 25 years ago identified that support from external change agents helped schools implement and embed changes<sup>41</sup>. This has been supported elsewhere. A particular challenge of roll-out is when there are insufficient committed and high quality staff being brought on board to cope with the pace of the roll-out, and teachers are quick to spot consultants who are not well-suited to their role<sup>42</sup>. High quality materials have also been found a valuable source of support, especially at the earlier stages of implementation<sup>43</sup>.

29 Lieberman, A. and Miller, A. (2001) *Teachers Caught in the Action*. New York: Teachers College Press.

30 Hargreaves, A. and Fink, D. (2000) The three dimensions of education reform, *Educational Leadership* 57 (7):30-34

31 Lipsitz, J., Jackson, A. W. and Meyer Austin, L. (1997) *op cit*.

32 Fullan, M. (2001) *The New Meaning of Educational Change* 3rd edition London: RoutledgeFalmer.

33 Fullan, M. (2001) *op cit*. p.69-70.

34 These factors are developed from those outlined in Fullan (2001).

35 Datnow, A. and Castellano, M. (2000) Teachers’ responses to Success for All: How beliefs, experience and adaptations shape implementation, *American Educational Research Journal* 37 (3):775-799.

36 See, for example, Bodilly, S. (1996) Lessons Learned: RAND’s Formative Assessment of NAS Phase 2 Demonstration Effort, in S. Stringfield, S. Ross and L. Smith (eds) *Bold Plans for Restructuring Nine Designs for New American Schools* New Jersey: Lawrence Erlbaum Associates.

37 Stringfield, S. (2002) Issues in conducting and studying large scale educational reform, *Journal of Educational Change* 3 (1), 63-73. Quote p. 67.

38 Stigler, J. W. and Hiebert, J. (1999) *The Teaching Gap: Best Ideas from the World’s Teachers for Improving Education in the Classroom*. NY: The Free Press; Cuttance, P. (2000) *School Innovation: Pathway to the Knowledge Society*. Commonwealth of Australia: Department of Education, Training and Youth Affairs.

39 Showers, B., Joyce, B. and Bennett, B. (1987) Synthesis of research on staff development: a framework for future study and a state-of-the-art analysis, *Educational Leadership* 45 (3):77-87.

40 Joyce, B., Calhoun, E. and Hopkins, D. (1997) *Models of Learning – Tools for Teaching* Buckingham: Open University Press.

41 Berman, P. and McLaughlin, M. (1977) *Federal Program Supporting Educational Change: Factors Affecting Implementation and Continuation* Santa Monica, CA: Rand Corporation.

42 Datnow, A., Hubbard, L. and Mehan, H. (2002) *Extending Educational Reform from One School to Many* London: RoutledgeFalmer.

43 Fullan, M. (2000) *op cit*

An appropriate level of challenge, also described in the literature as 'pressure' and 'accountability', has also been identified in some research as a beneficial element of reform, particularly in the early stages. On the basis of their analysis of reform in Chicago, Bryk and colleagues (1998)<sup>44</sup> emphasise that a commitment to rigorous accountability is a key feature of the "extra-school infrastructure" needed to promote improvement. External pressure can provide the 'urgency' that stimulates schools' initial involvement in change efforts<sup>45</sup>, but compliance can also lead to dependency and a loss of confidence that decreases creative and innovative practice<sup>46</sup>. The use of tests for accountability purposes can have similar doubled-edged effects. There is extensive evidence to show how high-stakes tests can narrow the teaching repertoire by teaching to the test<sup>47</sup>. Assessments, however, that address the range of skills that an initiative is intended to improve may encourage more effective teaching<sup>48</sup>.

### Capacity of those implementing the reform

One of the fundamental issues of improvement and reform is when institutions do not have the capacity, at the individual, collective or organisational levels to be able to implement the changes. In these cases, what frequently happens is that ideas get adopted on the surface but there is no meaningful change in teaching and learning<sup>49</sup>.

**Individual capacity:** McLaughlin and Oberman (1996)<sup>50</sup> view "the problem of reform" as "a problem of teachers' learning". For teachers of middle years pupils, learning to change requires intense intellectual and emotional effort<sup>51</sup>. Influences on individuals' capacity to implement changes in teaching and learning include their existing knowledge, skills, professional confidence, emotional wellbeing, and the extent to which they choose to work with others. Individuals' actions are influenced by what they believe. A large body of evidence suggests that belief change during

adulthood occurs relatively rarely<sup>52</sup>, although a counter argument suggests that changing teachers' behaviour and practices precedes changing beliefs, the latter occurring once teachers' are convinced that the former has made a positive difference<sup>53</sup>. Teachers' professional confidence also influences their capacity to take external frameworks and materials and translate them into practice<sup>54</sup>.

**Department capacity:** Research on secondary schools' academic effectiveness has drawn attention to the importance of subject departments<sup>55</sup>, and in many schools, the departmental or subject cultures often differ from those of the whole school<sup>56</sup>, operating as 'realms of knowledge'<sup>57</sup> that are hard to penetrate. Subject leaders can greatly influence the culture of teaching within their subject or curriculum area, and subject leadership is an important factor in secondary school improvement<sup>58</sup>. Evidence from an international study on the Professional Culture of Teachers suggests that a strongly collaborative culture within a subject department or other small grouping has a positive impact on teachers' work<sup>59</sup>.

**School capacity:** Some schools are more successful in developing conditions that help them to implement improvement, while others need to work on basic climate setting, focusing on key issues of management, organisation and ethos before the necessary attention can be devoted to teaching and learning. School culture is a critical component of schools' capacity for implementation, as are motivation and emotions, the community they create, making connections, inquiry and creativity, ongoing learning opportunities and time<sup>60</sup>. Essentially, forces outside classrooms influence the quality of learning and teaching, and therefore, reform efforts have to focus within schools on both classroom learning conditions and school conditions<sup>61</sup>. Research increasingly suggests that teachers learn more when they are part of a professional learning community<sup>62</sup>, because such communities promote collaboration and

44 Bryk, A., Sebring, P., Kerbow, D., Rollow, S. and Easton, J. (1998) *Charting Chicago School Reform* Boulder, CO: Westview Press.

45 Earl, L. and Lee, L. (2000) Learning, for a change: school improvement as capacity building, *Improving Schools* 3 (1):30-38.

46 Hargreaves, A. (in press) *Sustaining Teaching and Leading in the Knowledge Society*. New York: Teachers College Press; Earl, L., Watson, N. and Torrance, N. (2002) Front row seats: what we've learned from the National Literacy and Numeracy Strategies in England, *Journal of Educational Change* 3 (1):35-53.

47 Madaus, G. (1988) The Influence of Testing on the Curriculum, in L. Tanner (ed) *Critical Issues in Curriculum*, 87th Yearbook of NSSE Part 1 Chicago, IL: University of Chicago Press.

48 Black, P. (1998) *Testing: Friend or Foe?* London: Falmer Press.

49 Fullan, M. (2000) *op cit*.

50 McLaughlin, M. W. and Oberman, I. (1996) Introduction – Teacher Learning: New Policies, New Practices, in M.W. McLaughlin and I. Oberman (eds) *Teacher Learning: New Policies, New Practices*. New York and London: Teachers College Press.

51 Hargreaves, A., Earl, L., Moore, S. and Manning, S. (2001) *Learning to Change Teaching Beyond Subjects and Standards* San Francisco: Jossey-Bass.

52 Pajares, M. F. (1992) Teachers' beliefs and educational research: cleaning up a messy construct, *Review of Educational Research* 62 (3):307-332.

53 Fullan, M. (2001) *op cit*.

54 Helsby, G. (1999) *Changing Teachers' Work*. Buckingham: Open University Press.

55 Harris, A., Jamieson, I. and Russ, J. (1995) A study of "effective" departments in secondary schools, *School Organisation*, 15 (3):283-299; Sammons, P., Thomas, S. and Mortimore, P. (1997) *Forging Links Effective Schools and Effective Departments* London: Paul Chapman.

56 Huberman, M. (1992) *Critical Introduction*, in M.G. Fullan *Successful School Improvement* Buckingham: Open University Press.

57 Siskin, L.S. (1994) *Realms of Knowledge Academic Departments in Secondary Schools* London: Falmer Press.

58 Busher, H. and Harris, A. (2000) *Subject Leadership and School Improvement* London: Paul Chapman.

59 Helsby, G. (1996) Defining and developing professionalism in English secondary schools, *Journal of Education for Teaching* 22 (2):135-148.

60 Stoll, L., Fink, D. and Earl, L. (2003) *It's About Learning (and It's About Time)* London: RoutledgeFalmer.

61 van Velzen, W., Miles, M., Eckholm, M., Hameyer, U. and Robin, D. (1985) *Making School Improvement Work*. Leuven, Belgium: ACCO; Hopkins, D. (2001) *School Improvement for Real* London: RoutledgeFalmer.

62 McLaughlin, M. W. and Talbert, J. E. (2001) *Professional Communities and the Work of High School Teaching* Chicago and London: University of Chicago Press; Louis, K. S., Kruse, S. and Associates (1995) *Professionalism and Community: Perspectives on Reforming Urban Schools* Thousand Oaks, CA: Sage.

collective responsibility for pupil progress and development. Leadership also appears to be an important feature of school-wide change. The role of the principal as an active and ongoing supporter of reform has been shown to be critical to the success of school-wide change efforts<sup>63</sup> and changes of leadership, at senior and teacher levels, have been found to have a considerable impact on reform implementation and sustainability<sup>64</sup>.

Schools with ostensibly similar contextual characteristics, and even similar baseline results, display different capacity for improvement<sup>65</sup>. This raises issues about whether any one reform strategy can fit all schools and the extent to which there is a need to differentiate strategies for different schools.

**LEA support capacity:** The importance of the role of the LEA to school improvement has been emphasised<sup>66</sup>, and the major North American studies conclude that district-level processes are critical to support improvement. Districts, however, have been found to vary in their effectiveness<sup>67</sup>, as have LEAs in their support for improvement<sup>68</sup>. Little is understood about LEA capacity, although it appears that external change agents also need support if they are to be successful in their work with teachers and schools<sup>69</sup>.

### External factors affecting both the reform and implementers' capacity

The work of teachers, departments, schools and LEAs is affected by the local and national context in which they are located. A range of external factors influence implementation of any reform.

**Time:** Fullan (2001)<sup>70</sup> argues that while it is impossible to demarcate precisely how long implementation takes, for most changes it takes two or more years: "only then can we consider that the change has really had a chance to become implemented". Furthermore, he notes that from the beginnings of change – initiation – to when they are embedded – institutionalisation – is a lengthy process:

... even moderately complex changes take from 3 to 5 years, while larger scale efforts can take 5 to 10 years with sustaining improvements still being problematic. The single most important idea ... is that change is a process, not an event.

Paradoxically, time is one of the most common and serious barriers to reform from the viewpoint of those implementing it<sup>71</sup>.

**Workload, stress and teacher shortages:** A study of teachers in Australia, New Zealand, the US and UK found common international patterns of discontent among teachers related to increased workload, pace and nature of change, as well as perceptions of a decrease in status and professionalisation<sup>72</sup>. This can be exacerbated by stress and general concerns about workload commonly associated with large-scale reform efforts<sup>73</sup>, given that schools tend to be involved in many innovations at one time. This tends, however, to occur more frequently when teachers are not fully committed to the reform or cannot see the value of it<sup>74</sup>, and can also occur in smaller schools when staff have to share out more responsibilities. The morale of some teachers has also been found to be affected during swift implementation of reform<sup>75</sup>, and the knowledge of an impending inspection is sufficient to cause "development paralysis" in some schools<sup>76</sup>. A consequence of some of these issues in national educational contexts is that some teachers chose to leave the profession, giving rise to teacher shortages which, in turn, further affect implementation and can place those remaining under added pressure.

**The local context:** Schools are located in and serve very different communities. The impact of pupils' background characteristics on their schools' achievement is well charted<sup>77</sup>. Disadvantage does not automatically inhibit a school's capacity. Depending on the measures of school quality, however, some schools face more of an uphill struggle in helping their pupils achieve national standards.

63 Muncey, D. and McQuillan, P. (1996) *Reform and Resistance in Schools and Classrooms*. New Haven: Yale University Press.

64 Datnow, A., Hubbard, L. and Mehan, H. (2002) *op cit*.

65 Hopkins, D. and Harris, A. and Jackson, D. (1997) Understanding the school's capacity for development: growth states and strategies. *School Leadership and Management*, 17 (3):401-11.

66 NFER (2000) *The LEA Contribution to School Improvement* Slough: NFER.

67 Rosenholtz, S.J. (1989) *Teachers' Workplace: The Social Organization of Schools* New York: Longman.

68 Ofsted and Audit Commission (2001) *Local Educational Authority Support for School Improvement* Norwich, HMI Stationery Office.

69 Datnow, A., Hubbard, L. and Mehan, H. (2002) *op cit*; Lieberman, A. (2001) *The Professional Lives of Change Agents: What They Do and What They Know*, in F. O'Connell Rust and H. Freidus (eds) *Guiding School Change: The Role and Work of Change Agents* New York and London: Teachers College Press.

70 Fullan, M. (2001) *op cit* p.52.

71 Grossman, P. (1996) *Of Regularities and Reform: Navigating the Subject-specific Territory of High Schools*, in M. W. McLaughlin and I. Oberman (eds) *Teacher Learning: New Policies New Practices* New York: Teachers College Press.

72 Scott, C., Stone, B. and Dinham, S. (2000) *International Patterns of Teacher Discontent* Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, April.

73 Earl, L., Watson, N. and Torrance, N. (2002) *op cit*.

74 Datnow, A., Hubbard, L. and Mehan, H. (2002) *op cit*.

75 Woods, P., Jeffrey, B., Troman, G. and Boyle, M. (1997) *Restructuring Schools: Reconstructing Teachers* Buckingham: Open University Press.

76 Stoll, L. and Fink, D. (1996) *Changing Our Schools: Linking School Effectiveness and School Improvement* Buckingham: Open University Press.

77 See, for example, Mortimore, P. and Whitty, G. (1997) *Can School Improvement Overcome the Effects of Disadvantage?* London, Institute of Education: Viewpoint Series.

## 2.3 Sustainability of Reform

While the focus of the KS3 Pilot, and of this evaluation, is implementation, this is viewed as only the second phase of change, after initiation. For those investing significant effort in designing and supporting reform, a critical issue is whether the changes, once introduced, will be continued and reform can be sustained. Huberman and Miles (1984)<sup>78</sup> explain that continuation of innovations depend on whether:

- the change is embedded and built into structures, for example through policy, budget and timetable changes;
- a critical mass of leaders and teachers skilled in and committed to the change has been generated; and
- procedures have been established for continuing assistance, such as a trained group of consultants – especially important for supporting new teachers and leaders.

Considerable further evidence suggests the importance of focusing on organisational culture as well as structures:

**Without a direct and primary focus on changes in organisational factors . . . whatever impact there is will be short-lived<sup>79</sup>.**

## 2.4 Conclusion

The KS3 Strategy, as an extensive national programme of middle years reform, is unparalleled in its scale. Evidence from other international reforms of middle years schooling and from other large-scale reform efforts, however, reveals that:

- the middle years dip and increasing pupil disengagement is found in other countries;
- in the middle years, the particular learning and social needs of early adolescents have to be addressed;
- reform of the middle years involves a complex mix of addressing pupils' needs, teachers' beliefs and practice, building capacity at all levels, and providing sufficient quality support and appropriate challenge;
- change is extremely complex, takes time, and implementing changes depends on the change itself, the capacity of those implementing it, and the prevalent external factors in the system within which implementation occurs; and
- if large-scale reform, such as the KS3 Strategy, is to make a difference, it must involve depth (improving important aspects of pupils' learning), breadth (extending to many schools), and length (it needs to be sustained over time), including connectedness (with other initiatives).

<sup>78</sup> Huberman, M. and Miles, M. B. (1984) *Innovation up Close* New York: Plenum.  
<sup>79</sup> Fullan, M. (2001) *op cit.*





# Chapter 3: The KS3 Pilot

## 3.1 The KS3 Policy

The origins of the KS3 Strategy can be found in the widespread concern that pupils make limited progress during Years 7-9 and many become demotivated and disengaged. While this pattern is found in middle years schooling in other countries, it has been brought in to sharper focus by the achievements of the National Literacy Strategy (NLS) and National Numeracy Strategy (NNS) at KS2.

The KS3 Strategy is a complex and ambitious Government initiative intended to transform education for 11 to 14 year olds. It is based on four key principles: expectations; progression; engagement; and transformation. The Pilot involved five main strands – English, mathematics, science, information and communication technology (ICT), and teaching and learning in the foundation subjects (TLF).

The KS3 Pilot was used to trial both the model of dissemination and the programmes and materials of the Strategy. In order to do this it encouraged schools to implement it with minimal adaptation to provide feedback on the programmes and materials. It involved 205 schools in 17 LEAs across the country, although in ICT the Pilot was restricted to 40 schools in five LEAs. Participation in the Pilot was based on LEAs being invited to "express interest". There was no formal bidding process and some LEAs were encouraged to respond because they were already involved in schemes which linked to the Strategy, for example funded work on literacy for lower attainers in Year 7. The final sample of 17 LEAs was intended to be broadly representative. In terms of demographics and school achievement the sample slightly over-represented less advantaged schools. In some smaller LEAs all their secondary schools were involved in the Pilot, while in most larger LEAs schools applied to join the Pilot or were invited by the LEA to participate.

The Pilot Strategy was underpinned by centrally-driven mechanisms for supporting and challenging schools and LEAs. Support mechanisms included:

- a range of centrally developed training and classroom materials and resources;
- development of frameworks for English, mathematics, and science;
- training and practical support from regional directors and LEA consultants;
- departmental audits to inform planning;
- literacy and numeracy summer schools and catch-up programmes for pupils transferring with KS2 literacy and numeracy attainments below level 4; and
- booster classes for Year 9 pupils in preparation for the KS3 tests.

The challenge mechanisms included:

- progress and optional tests in English and mathematics. Progress tests were intended for pupils entering Year 7 at level 3 and were externally marked;
- optional tests were intended for pupils at level 4 and above and were teacher marked. Both were mandatory for pilot schools in 2001;
- pilot schools were expected to set targets for both progress tests and for the Key Stage 3 tests at Year 9; and
- monitoring of the Pilot by Ofsted through a programme visits to pilot schools.

### 3.2 Funding

Some £10 million was invested in the first year of the Pilot (2000-2001). Each pilot school received around £25,000. In addition, LEAs received £250,000 to cover support for their schools and to promote within them effective teaching and learning at KS3. In Transforming Key Stage 3: Guidance for Pilot Local Education Authorities on Producing an Outline Plan (May 2000), it was suggested that LEAs allocate 'around £112,000' to English and mathematics strands in the first full year and hold some funding in reserve for other strands. Non-earmarked expenditure could be used to develop and support 'innovative and imaginative local proposals' from a 'menu of approved activities to improve standards at KS3'. Only 5 of the 17 pilot LEAs piloted the ICT strand and received additional resources for this. A further £10 million was available for the second year of the pilot (2001-2002) as part of a £82 million package announced in autumn 2000. LEAs and schools were funded at around the same level as the first year. The £82 million package also included £50 million to support national implementation of the English and mathematics strands and £22 million to run over 2000 literacy and numeracy summer schools in 2001. All LEAs

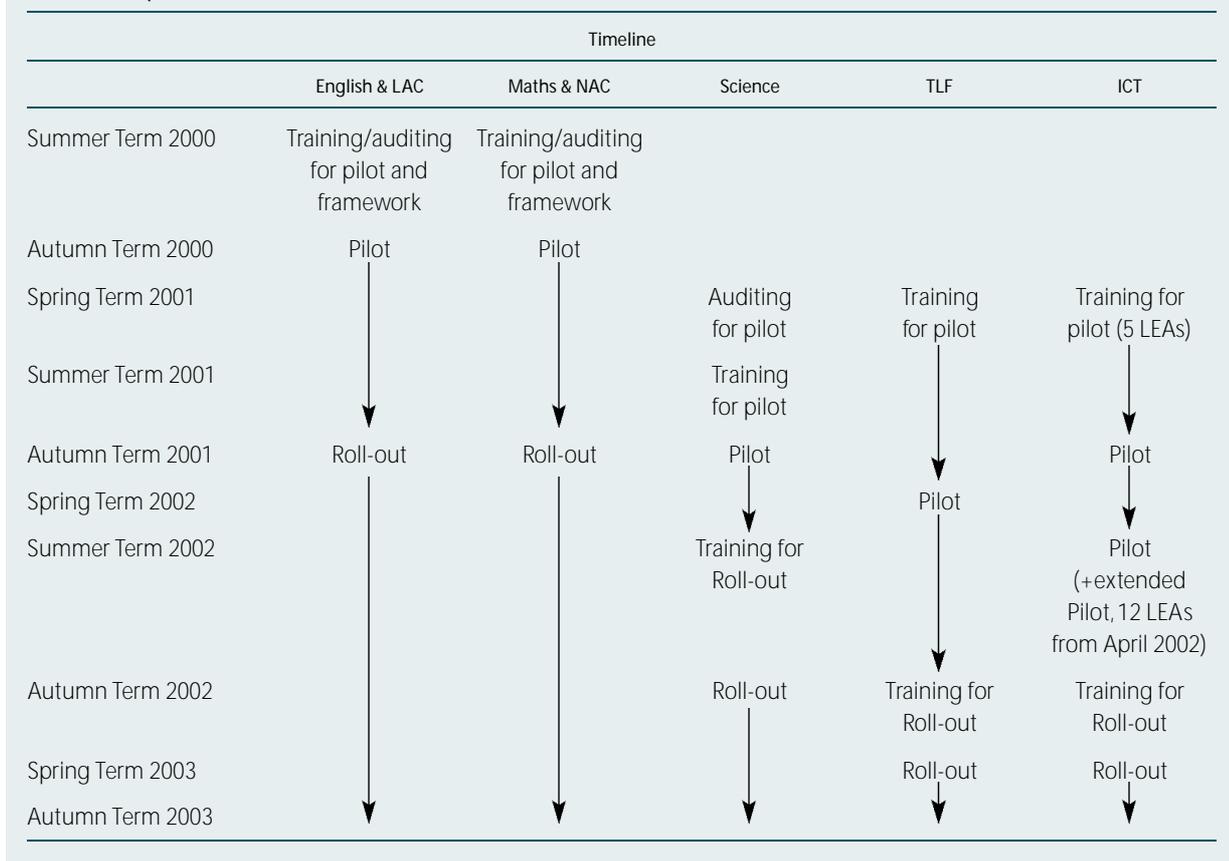
were given details of their Standards Fund allocations for 2001-2002. They and schools were given further guidance on the menu of activities for non-earmarked expenditure to ensure that the resources were used in a focused and innovative way. There was also funding available for the Year 9 booster programme in the spring term of 2001 in English, mathematics and science, while in 2002, booster funding was part of a national programme.

### 3.3 Pilot Timetable

The Pilot programme was phased (see Diagram 3). Piloting English and mathematics, which included Literacy Across the Curriculum (LAC) and Numeracy Across the Curriculum (NAC), started in September 2000 after auditing and initial training in summer 2000.

Science began in the spring term of 2001 with the audit; training in the summer term 2001; then introduction into the classroom from September 2001. Roll-out began with training in the summer term 2002; followed by introduction into the classroom from September 2002.

**Diagram 3:**  
KS3 Pilot implementation



The TLF pilot began with some early training in spring 2001; further training in the summer and autumn terms of 2001; and began fully in spring 2002. National roll-out of the foundation subjects strand commenced in September 2002 with training; and the strategy begins in schools spring 2003.

ICT (in the five LEAs) began in the spring term 2001 and continued there until the summer term 2002 when some further trialling of the materials was undertaken by the full 17 pilot LEAs. National roll-out commenced in September 2002 with training; and the Strategy begins in schools spring 2003.

In the second year of the Pilot the national Strategy ('roll-out') also began, with an initial curriculum focus on English and mathematics, and LAC and NAC. Each strand was, therefore piloted for one year, and in the second year of the Pilot the school became part of the national roll-out in English and mathematics. Our evaluation took place between July 2001 and July 2002, spanning the roll-out in English and mathematics and the Pilot in Science, TLF and ICT.

The short timescale meant that the national development team, LEAs and pilot schools had to work to very pressured timetables, particularly in terms of feedback in relation to the national roll-out.

### 3.4 Rationale for the Strands and the Phasing of their Introduction

The logic of beginning with the English and mathematics strands, was that these built naturally on the NLS and the NNS and had clear outcome measures and targets in the form of the Year 9 tests. The addition of LAC and NAC were seen to further emphasise the centrality of literacy and numeracy and to build on Ofsted findings of weakness in developing coherent literacy and numeracy strategies at KS3. The political urgency of addressing standards in KS3, following the Secretary of State's January 2000 North of England speech, accounted for the speed at which the Pilot was introduced, a timetable helped by transferring some resources and key personnel from the primary NLS and NNS teams.

The inclusion of the science and ICT strands was seen as the consequence of weaknesses in KS3 teaching identified by Ofsted. Limited progression between KS2 and KS3 in national test results confirmed these weaknesses in science, as well as providing a ready indicator of progress. Because it was not building on a KS2 strategy there was less in place

to base it on. Responding to the Ofsted analysis of the weaknesses of much KS3 science teaching and to the work in science on thinking skills (eg CASE)<sup>80</sup>, there was an emphasis on pedagogical skills as well as on managing KS3 science, securing progression and on developing subject knowledge.

The development of the ICT strand was based on issues raised by Ofsted about standards in ICT, particularly when taught through cross-curricular work. The decision was taken to focus the ICT strand on the teaching of ICT as a discrete subject as the first priority for raising standards. The ICT strand was inherited from a BECTA and QCA project and was in a transition phase when it began in the spring term 2001. It had more limited development resources and networks and the Pilot was initially conducted in only 40 schools.

TLF involved a more complex rationale. The original formulation in terms of thinking skills and assessment for learning, highlighted by David Blunkett in his January 2000 speech, was incorporated into the focus of improving teaching and learning practices in the foundation subjects, with pilot schools free to choose, typically, two subject departments.

### 3.5 Implementation

In addition to funding, the agreement to take part in the Pilot brought with it training, pilot materials and ongoing consultant work in pilot schools. Each LEA and pilot school was encouraged to appoint a strategy manager and to designate leaders for each strand, known as line managers, in the LEA. Other commitments included running summer schools, establishing catch-up provision for Year 7 pupils entering at level 3, setting pupil targets, taking progress and optional tests. Each of the school departments involved in a strand was expected to conduct an audit and in mathematics, English, science, ICT and TLF to inform planning and identify training needs. English, mathematics and science departments also trialled draft teaching frameworks for progression during KS3. Feedback from schools then contributed to shaping the published frameworks.

The Pilot implementation model was adapted from the primary literacy and numeracy strategies. The structure involved a national director, deputy director and regional directors for each strand who were appointed and managed by strand directors. The regional directors, in turn, trained

80 Cognitive Acceleration in Science Education – Adey, P. and Shayer, M. (1994) Really Raising Standards: Cognitive Intervention and Academic Achievement London: Routledge.

consultants. These had been appointed by the participating LEAs, though paid through the DfES Standards Fund, and regional directors monitored their training, shadowed their in-school activities and provided extra support. Line management of the consultants' work was the responsibility of LEA line managers or, in the case of smaller LEAs, strategy managers. Centrally prepared materials were used to 'cascade' the training to consultants, who then trained those teachers who attended the training. It was expected that a minimum of two teachers, the strand leader<sup>81</sup> and a key teacher, would attend the training sessions. These teachers received the materials which they were expected to disseminate in schools, with the help of the consultants who would visit pilot schools to work with teachers.

### 3.6 Success Criteria

The Briefing for Pilot Schools (2000) outlined a range of indicators that would be used to measure the Strategy's success. For pupils these were:

- continuous improvement with no 'plateauing' or falling back following transfer and transition;
- improved attainment by all pupils across English, mathematics and science at Year 9;
- the meeting of targets set;
- improved attendance in those schools where it was below 90%;
- reduced unauthorised absence;
- reduced exclusions across KS3;
- improved attitudes and motivation towards school, learning and work; and
- improvement in standards throughout KS4.

For teachers the indicators were:

- reflection on teaching practice becoming the norm;
- thinking skills developments aiding the consistency of practice across subjects and key stages;
- a deeper understanding of subject-related pedagogy demonstrated by all KS3 teachers; and
- all teachers having confidence in using 'assessment for learning' and 'assessment against standards' for diagnostic and planning purposes as part of school improvement.

### 3.7 Feedback Mechanisms

The purpose of the Pilot was to inform the further development of materials and strategies for the national roll-out of the KS3 Strategy. A series of feedback 'loops' were put into place by the professional team in order to monitor and modify the Pilot Strategy.

These mechanisms involved both formal and informal mechanisms. The more formal ones included five progress monitoring surveys sent out by the professional team via the LEA and a MORI telephone survey of headteachers in pilot schools. There were also regular focus groups with both headteachers and school strategy managers. Feedback was obtained from national, regional and local conferences that involved regional directors, LEA staff and consultants. These were complemented by feedback from Ofsted and visits and survey data from our evaluation.

The extensive feedback that the policy team and the professional team were receiving from these multiple sources allowed them to make changes to materials and strategies, which were then incorporated into the national roll-out.

<sup>81</sup> This has often been described as 'subject leader', but included lead teachers of the TLF strand and those who were leading on KS3 strands but were not heads of a department.



# Chapter 4: The Evaluation

## 4.1 Purpose and Limits of the Evaluation

The purpose of this evaluation was to determine the effectiveness of the implementation of the Pilot in schools and what lessons from it could help in the national roll-out. The remit was to inform the Strategy rather than to assess whether or not the Strategy should be rolled out. The evaluation team worked as a 'critical friend' in offering ongoing feedback to DfES and the KS3 national team to inform Strategy developments.

One of the strengths of the Pilot has been the multiple sources of feedback on which the KS3 national team has drawn. Our work complemented that of the national team's own progress monitoring, and Ofsted's programme of visits that focused on classroom practice, which was not therefore part of our remit<sup>82</sup>.

The particular contribution of this evaluation was to investigate the capacity of LEAs, schools, departments and teachers to engage with the Pilot Strategy and to determine what helped and hindered implementation.

It was not part of our remit to evaluate the content of the Strategy, for example the frameworks in English and mathematics, or the teaching and learning strategies emphasised in TLF and science. Our brief was to assess schools' and teachers' reaction to, and use of them in different contexts, and pupils' responses.

The evaluation ran from July 2001 to July 2002. This means we can only offer a limited account of the implementation, which began in summer 2000, and discussions of the implementation of the English and mathematics strands are based on retrospective accounts. A particular complexity for the research team here was that, even for pilot schools, the national roll-out of the Strategy in English and mathematics began in September 2001, and so Pilot and

Strategy became fused. In reporting, we have sought to stay with the terminology of the Pilot Strategy, but there is some blurring as those we interviewed began to use the new terms and new members of staff at all levels were not familiar with Pilot terminology. For example, what was generally known as 'three-part lessons' in the earlier stages of the Pilot and was also known as 'structured lessons' has more recently evolved into 'a structured approach to lessons'.

A further issue was that it was not possible to determine school and LEA capacity prior to implementation and therefore any change over time cannot be causally attributed to Pilot activities. Additionally, an evaluation of only one year's duration did not allow us to look at capacity for sustainability over time. It would be necessary to carry out further long-term research to explore this issue.

## 4.2 Evaluation Framework

A key feature of this evaluation has been to work towards a framework that will make better sense of how a complex strategy is understood, implemented and sustained by different schools and LEAs. A lens through which we observed the KS3 Pilot was capacity. Capacity is a complex blend of motivation, skill, positive learning, organisational conditions and culture, and external context and infrastructure of support<sup>83</sup>. Put together, it gives individuals, groups and, ultimately, whole school communities the power to get involved in and sustain learning. Schools significantly differ from each other in their readiness to engage in improvement initiatives, the ease with which they implement change, and their capacity to sustain improvement over time. LEAs differ from each other as well in their capacity, although very little is currently known about the capacity of LEAs. This evaluation offered the opportunity to explore LEAs' capacity to support schools in more detail.

82 An independent evaluation has also been commissioned by the Association of Teachers and Lecturers.

83 Stoll, L. (1999) Realising our potential: understanding and developing capacity for lasting improvement, *School Effectiveness and School Improvement* 10 (40):503-32.

Our brief has been to evaluate the KS3 Pilot and its potential for transforming teaching and learning in secondary schools, as well as its potential for whole school improvement. Improvement and educational reform are fundamentally concerned with changing what already exists, and to bring about real and meaningful change depends on being prepared to engage in an ongoing process of learning.

It is relatively easy for some schools, at least, to get started on the road to improvement and to achieve considerable success with implementation. When such schools are visited a number of years later, there is frequently evidence of subsequent decline<sup>84</sup>. It is also well documented that sustaining change is one of the critical challenges for reform efforts<sup>85</sup>: in short many reforms are not sustained<sup>86</sup>. Revisiting the United States' Rand Change Agent Study of the 1970s, McLaughlin (1990)<sup>87</sup> concluded, "the net return to the general investment was the adoption of many innovations, the successful implementation of a few, and the long-run continuation of still fewer: Bringing about change that dissipates as soon as other important initiatives are introduced is a waste of time, effort and resources. Therefore, considerations of sustainability are important, even near the start of a reform process.

Capacity is not static. Some schools involved in improvement efforts develop their capacity over time, while others do not. As part of their improvement efforts, schools with the capacity to sustain change develop the necessary conditions, as well as having an infrastructure of external support<sup>88</sup>. Capacity building is a critical part of this infrastructure. One aim of our evaluation was to look at the capacity-building potential of the Pilot.

Broadly we wanted to understand and differentiate between schools and LEAs who were more or less ready to engage with the Pilot in the first place, and also who had or did not seem to have the capacity to develop, sustain and embed the Pilot, making it their own. We explored this from the perspective of how different schools responded to the Pilot, implemented it and tried to sustain it, by trying to determine what helped or hindered the flow between different levels. Given that the purpose of the Pilot was to inform the intended roll-out, one reason we focused on capacity was to try to determine what in the roll-out needed to be differentiated for teachers, departments, schools, and LEAs.

### 4.3 Questions Guiding the Evaluation

The following questions guided our evaluation activities and analysis:

- How effective is the implementation of the KS3 Pilot? Are the training, practical support and materials transforming teaching and learning in KS3 pilot schools? Is implementation leading to higher teacher expectations of pupils? Is it promoting improved progression between KS2 and KS3 and within KS3? Have there been positive changes in pupils' achievement and engagement?
- How effective is the implementation of different strands within the Pilot? How have schools engaged with each strand? Are there consistent patterns of response across and within strands?
- To what extent is the implementation of the KS3 Pilot dependent on the capacity of individual teachers departments/schools and LEAs?
- What support and challenge is required to build capacity at individual, departmental, school and LEA levels for the purpose of successful implementation and sustainability of the KS3 Pilot? Does support and challenge need to be differentiated according to the different capacity of individual teachers, departments, schools and LEAs?
- What is the potential for the KS3 Strategy to promote whole-school improvement and transformation? Does implementation of the Pilot work better when embedding within whole school improvement?
- How do schools most effectively integrate the KS3 Pilot with other school and Government initiatives?
- What are the key issues in moving from the KS3 Pilot to the National Strategy? What examples of successful strategies at teacher, department, school and LEA level might be fed into the development and implementation of the Strategy in different types of schools?

84 Fink, D. (2000) *Good Schools/Real Schools/Why School Reform Doesn't Last*. New York: Teachers College Press; Maden, M. (2001) *Success Against the Odds – Five Years On*. London: RoutledgeFalmer.

85 Fullan, M. (2001) *op cit*.

86 Datnow, A., Hubbard, L. and Mehan, H. (2002) *op cit*.

87 McLaughlin, M. (1990) The Rand change agent study revisited: macro perspectives, micro realities, *Educational Researcher* 19 (9):11-16. p. 12.

88 Hopkins, D. (2001) *op cit*.



# Chapter 5: Evaluation methodology

## 5.1 Design

We used a range of approaches to assess the implementation and early impact of the KS3 Pilot in order to gain as full a picture as possible. Early interviews in schools and LEAs identified issues for further exploration. We drew particularly heavily on interviews in 12 representative case study schools and six representative case study LEAs (two schools in each of the LEAs) to provide the fine-grained analysis of the daily realities of the Pilot, in terms of strategy and implementation. We also attended Pilot training and meetings and shadowed consultants.

We made several shorter visits to schools and LEAs to follow up particular issues and an international consultant from the University of Melbourne visited three schools to offer external international verification of our findings, which were also discussed with another consultant from the University of Melbourne. Visits to a small number of schools and an LEA involved only in the national roll-out enabled us to validate some of the issues emerging for the roll-out. In total, we interviewed more than two hundred people, some of them two or three times.

A series of surveys helped us gain a more general and wider understanding of the perceptions of those involved (see Annex A). This included a large-scale survey of Year 8 pupils' attitudes in both pilot and non-pilot schools, a survey addressed to KS3 teachers, and surveys for school strategy managers and those involved with KS3 in pilot LEAs. We placed some emphasis on teachers' perceptions because changing perceptions are one early indicator for changing practice. The evaluation team also attended various regional, LEA and school-based training, briefing and INSET activities, as well as accompanying consultants on school visits.

In addition to these activities, we undertook a detailed analysis of the 2001 Year 7 progress and optional test results in pilot schools. This was then developed into a value added analysis in which we used KS2 test results as the prior attainment measure.

Through these various instruments, our aim was to understand the different stories of how implementation took place, what helped and constrained it, and the influence of capacity at individual, department, school and LEA levels. At the individual level, therefore, we looked at people's level of experience and confidence, as well as the way the nature of the pupil intake affected teachers' and individual leaders' work. At the department level, our questions focused on the leadership, learning culture, relationships, support and nature and focus of work, and we had a broadly similar focus at the school and LEA levels. We spent up to three days in each case study location, interviewing the leaders of different aspects of the Pilot and a range of other colleagues, as well as observing Pilot activities.

## 5.2 Sample of Pilot Schools and LEAs

Our implementation survey for school strategy managers was sent to every Pilot school. The rest of the evaluation involved working with a sample of Pilot schools. Our teacher survey sample included 51 schools (3 in each LEA), and the same sample was used for the pupil survey (plus one further case study school). We selected a representative sample of six LEAs, based on size, location, social context and Ofsted inspection results. We then selected two schools in each of these six LEAs. In choosing this further sub-sample of 12 case study schools, we attempted to ensure they were representative in terms of social context and KS3 attainment, while covering a range of other characteristics. So, for example, our case study schools varied in size (from under 500 to 1700 pupils), location (inner city, town and rural), and in the percentage of pupils from ethnic minorities and identified as having special educational needs. Two of the schools were voluntary aided, three had special status, two were involved in the ICT strand, and there was one middle school. The distribution of our sample on the basis of free school meals and KS3 attainment can be found in Annex B and a timetable of our evaluation programme is included in Annex C.





# Chapter 6: Tracking implementation and impact in schools and LEAs: Key themes

In this section we discuss the main findings of our research. These findings are summarised into six key themes:

- 6.1 Changing teaching and learning
- 6.2 Supporting change
- 6.3 Leadership and management
- 6.4 Making connections
- 6.5 Engaging pupils and assessing their learning
- 6.6 Differentiation in implementation and impact

In reporting findings, we have drawn on our various datasets. Unless otherwise stated, the interviews took place in case study schools and LEAs.

## 6.1 Changing Teaching and Learning

Reform efforts that do not directly address teaching and learning have a limited impact on improvement<sup>89</sup>, and school effectiveness studies indicate that the classroom has a greater effect on pupils' progress than the school as a whole<sup>90</sup>. What interests teachers most is what goes on between them and pupils in their classes. Fundamentally, the KS3 Strategy and its Pilot are concerned with changing teaching and learning. This was emphasised in the Briefing for Pilot Schools (2000) where four key words were introduced that subsequently became the principles underpinning the Pilot and Strategy: expectations; progression engagement and transformation. Directly or indirectly, each of these principles was geared towards changing teaching and learning in Pilot schools: promoting high expectations of pupils; enhancing progression between KS2 and KS3 and across KS3; engaging pupils and involving them more actively; and increasing teachers' repertoire of approaches: in short, "strengthening" teaching and learning.

A focus on teaching and learning was welcomed by most of the schools as something likely to generate long-term

improvement gains, but changing teaching and learning is not straightforward. It depends on commitment to do things differently and the investment of time and energy to learn new ideas and build them into one's practice. Our research highlights that schools, departments and teachers differed in their responses to changing teaching and learning, as well as the ways they went about this, their successes, difficulties and achievements.

### Key findings in changing teaching and learning

- Schools decided to get involved in change that will affect teaching and learning for a range of reasons. Within different schools, some people were keener than others on being involved in the Pilot.
- Capacity played an important role in changing teaching and learning. Individual capacity affected how teachers approached change. Motivation to expend the effort to change practice appeared to be a key factor of successful implementation. Confidence also affected teachers' perceptions of how flexible Pilot approaches were and their freedom to adapt them to suit their practice, and some had a stronger initial skill base which made it easier to incorporate changes. School and department capacity also provided more or less favourable environments for change.
- The process teachers went through as they changed their practice was complex and was helped or hindered by a range of factors. These included: the availability of support; time; the language of change; dealing with behaviour issues; workload and emotions; and competing initiatives.
- The Pilot appears to have helped raise expectations, extend repertoires, promote reflection on teaching and learning, and increase staff discussion about teaching and learning in most schools.

89 Elmore, R. (1995) Structural reform and educational practice. *Educational Researcher* 24 (9):23-26.

90 Teddlie, C. and Reynolds, D. (2000) *International Handbook of School Effectiveness Research*. London: Falmer Press.

## 6.1.1 Initial Readiness for Change

Reasons for getting involved in change vary. In the case of the Pilot, some schools had little choice because all of the secondary schools in their LEA were 'signed up', although schools in those circumstances were not necessarily unwilling to be involved. In larger LEAs, schools were invited or had to bid. We did not find schools where everyone was entirely positive or negative about getting involved in the Pilot. As with all change efforts, there was a complex braid of motivations associated with initial involvement. Early visits to KS3 pilot schools, however, showed that motivation to get involved in the Pilot appeared higher when:

- the Pilot, or parts of it, were seen as the solution to existing problems;
- the Pilot reinforced the aims of what were seen as similar current initiatives (eg. a focus on literacy or CASE<sup>91</sup>);
- teachers had already had positive experiences of aspects of the Pilot (e.g. the literacy and numeracy hour through other transition initiatives);
- teachers had noticed positive effects of the National Numeracy and Literacy Strategies on pupils entering Year 7;
- the content was seen as exciting and timely (e.g. a perceived need for change from a didactic to more active approach to teaching and learning or, as one headteacher commented: "We're excited about TLF. It has the potential to influence classrooms"; headteacher); and
- the Pilot offered extra, needed funding.

Initial motivation appeared much lower when:

- there appeared to be no need for change because of successful teaching and results ("If a class teacher has had good results for 15 years she or he is happy with what they are doing"; head of science);
- there was a feeling of initiative overload, linked with a perception that other national initiatives had been abandoned in the past, therefore it may be a waste of time;
- there was suspicion of how the Strategy would develop, and further changes that would be required;
- there was a lack of confidence in the Pilot's content (particularly for English and beliefs in how it should be taught); and
- setbacks occurred early on because of lack of confidence in the training they had experienced or difficulties in releasing staff.

## 6.1.2 The Importance of Capacity in Bringing about Change

Our findings suggest that capacity at all levels has played an important role in the way schools have implemented the KS3 Pilot.

### Individual Capacity

The process of change is rarely straightforward. It is easy to avoid change. As one headteacher noted of some staff's initial reactions:

*The teachers were just saying, "oh I do that" because there were echoes of former curriculum practices in the Pilot. But it's significantly different and requires you to change.*

We found different teachers approached change in different ways, varying according to their individual capacity: motivation – affected by prior experience and beliefs; skills and confidence.

### Motivation to change one's practice

Fullan (2001) has commented: "Educational change depends on what teachers do and think: it's as simple and as complex as that"<sup>92</sup>. A wealth of evidence points to the importance of motivation for learning, the relationship between teacher commitment and successful improvement, and the problems of compliance for meaningful and sustainable change<sup>93</sup>.

As individual teachers began engaging with the Pilot and to understand more about it, motivational issues emerged. Two criteria appeared critical for staff in case study schools to be willing to expend the effort to change their practice: they needed to be convinced that it would benefit both their teaching and pupils' learning<sup>94</sup>. The evidence for some came from seeing pupils' progress or seeing positive responses from pupils or behaviour improve as a result of different teaching approaches and setting appropriate levels of work<sup>95</sup>.

*Teachers are motivated to change when they think it will make a difference to a pupil's progress. I'm still shown a piece of work and teachers say 'look at this!' (head of English)*

*As I started to change I could see it working – I could see a difference with the Year 7 pupils – so I kept trying it. I'm doing a bit more now than before (mathematics teacher).*

91 Adey, P. and Shayer, M. (1994) op cit.

92 Fullan, M. (2001) op cit. p.115.

93 For example, Biggs, J.B. and Moore, P.J. 1993; Rosenholtz, S. (1989) op cit; Hargreaves, A., Earl, L., Moore, S. and Manning, S. (2001) op cit.

94 See, also, Askew, M., Brown, M., Rhodes, V., Johnson, D. and William, D. (1997) *Effective Teachers of Numeracy*. Final Report to the TA. London: Kings College School of Education.

95 The evaluation of the National Literacy Strategy (NLS) and National Numeracy Strategy (NNS) also suggests that early success appears to influence motivation, Earl, L., Fullan, M., Leithwood, K. and Watson, N. (2000) *Watching and Learning: OISE/UT Evaluation of the National Literacy and Numeracy Strategies* London: DfEE.

## Confidence and perceived flexibility of the change

Some teachers were more confident generally about their teaching; this was sometimes, but not always, because they were more experienced. They appeared to approach the Pilot in a more relaxed manner, taking the new ideas and considering how best they might incorporate them into their existing repertoire. Where they broadly agreed with Pilot teaching and learning approaches, they seemed comfortable with what they ultimately, if not initially, saw as the flexibility to adapt approaches to suit their pupils and their school context. Others perceived the Pilot teaching approaches to be less flexible, some struggling with having to 'adopt' approaches, although as the roll-out began, messages began to filter through to some teachers that there was more leeway for them to adapt approaches to suit their pupils' needs. Inevitably, however, individuals process information supplied to them in relation to their confidence, experience, opinions and pre-conceived ideas on the subject. Their reality of the information is then passed on to the next level where those individuals then reinterpret this information, and so on down the line. We found that people 'heard' different messages.

## Variations in skills

Teachers varied in their prior experience and comfort with using Pilot teaching and learning approaches. The structured lesson proved easier for some teachers to incorporate into their practice than for others. The plenary, in particular, proved challenging to a number of teachers and staff in several LEAs commented that the plenary was not being used properly. An early challenge for a number of teachers was to resolve difficulties in fitting the pedagogy into the constraints of lesson length:

*I'm still trying to cram it all into an hour. It feels like it needs to be spread out (mathematics teacher).*

*It's the practical detail as much as anything. I'm happy to teach this way, but the practical issue of fitting this into an hour is hard. When pupils arrive five minutes late, do you start your lesson starter then? Do you dock five minutes from the plenary? It's all of these pressures on time in the classroom (English teacher).*

Some teachers were working at a more advanced level. A head of RE described how he created resources and tasks, incorporating many of the Pilot approaches, "but I've now taken it that step further and introduced assessment into them as well, which was sometimes lacking previously".

## School capacity

In our evaluation framework, we highlighted the importance of school capacity to the success of change efforts. Bringing about change and enhancing teachers' learning opportunities is influenced by the way the workplace culture and structures support professional learning<sup>96</sup> and the development of professional learning communities where there is shared vision, collaboration, and a collective commitment to enhancing pupil learning<sup>97</sup>.

Some teachers felt encouraged to take risks and try out new techniques that required active pupil participation: for example, getting pupils to move around the room and vote on issues by positioning themselves physically, as well as giving pupils more time to think and making them more aware of what they could do. As one school strategy manager observed: "it has given us licence to try new things". There were, however, differences between schools in that in some there was more of a general atmosphere of it being all right for teachers to make errors and take risks.

The Pilot was, therefore, received and experienced differently in each school, due to the school's unique context and stage of development. Two schools, for example, saw the challenge of being involved in the Pilot in very different ways. One school had shown considerable improvement over the last few years and clearly appeared able to take on the Pilot. The headteacher, however, reflected that:

*Five years ago, we couldn't have run this far. It would have been one burden too many. If you are firefighting, you haven't the spare capacity, however important it is.*

The other school faced many challenges, and a hard-working staff were struggling with the demands of the Pilot, even though they believed in its focus on teaching and learning:

*It fits the needs of the school . . . . However, it's the delivery equation that has caused difficulties . . . . At what expense? (school strategy manager)*

*The amount of training needed, staff out, the awful impact on classes, especially the pupils I see. If they don't have regular teachers they really cause problems . . . The training was good – I went on two days for literacy – but the knock-on effect is bad (head of SEN).*

We included a set of general questions about the school in the teacher survey. These questions were developed to tap into issues of school capacity. Teachers were mixed in their perceptions about their school as a place to work (see Table 6.1).

96 Smylie, M. (1995) *Teacher Learning in the Workplace: Implications for School Reform*, in T. P. Guckey and M. Huberman (eds) *Professional Development in Education: New Paradigms & Practices*. New York: Teachers College Press; Hopkins, D. (2001) op cit.

97 Louis, K.S. Kruse, S. and Associates (1995) op cit. Stoll, L. and Fink, D. (1996) op cit. Day, C. (1999) *Developing Teachers: The Challenges of Lifelong Learning*. London: Falmer Press; McLaughlin, M. and Talbert, J. (2001) op cit.

**Table 6.1**  
Perceptions of school as a workplace

	Agree/ strongly agree % <sup>98</sup>	Uncertain %	Disagree/ Strongly disagree %	Total number of respondents
There is a lot of collaboration in my subject department	80	11	10	359
Teachers in this school believe all pupils can be successful	74	12	14	357
My own professional development needs are taken seriously in the school	68	15	19	355
Within this school there is a climate that supports innovation and development	64	24	13	358
Teachers in this school feel well supported in experimenting with new teaching strategies	59	29	13	359
There is a shared whole-school vision of where the school is going	53	30	17	357
High levels of trust and respect exist in this school	48	30	23	356
Staff development time is used effectively	47	32	22	357
There is effective communication between teachers and senior managers	41	30	31	358
There is a lot of cross-departmental collaboration in this school	26	35	39	359

Generally, teachers were most positive about collaboration within their subject departments and expectations in the school. More than two thirds also thought that their own professional development needs were taken seriously, although they were less convinced that staff development time was used effectively. Cross-departmental collaboration, by contrast, was only viewed by a quarter of teachers as a feature of the school, and communication and trust were also issues for a significant minority.

Teachers in some schools were much more positive in their responses to these items than teachers in other schools. Taking the 20 schools with sufficient responses that could be interpreted as constituting a 'school view'<sup>99</sup>, we looked at groups of items (factors) in the survey that teachers seemed to view in similar ways. We labelled one emerging factor as the school capacity factor. This included all of the items in Table 6.1 except the one on collaboration within departments (see Department capacity). Our analysis highlighted three groups of schools on this factor: high (having most favourable views), medium and low (having least favourable views) capacity. Capacity was not related to context factors such as eligibility for free school meals.

We found differences between these groups in other responses to the questionnaire. For example, more teachers in high capacity schools (76%) than low capacity schools (47%) believed the Pilot had led to more focused staff discussion about teaching and learning. More teachers in high capacity schools (68%) than in low capacity schools (39%) also thought their school had taken a whole-school approach to implementing the Pilot. These results are based on a relatively small number of teachers and schools, and it would be important to explore them further.

### Department capacity

Most teachers depend on connections, relationships and social support to learn<sup>100</sup>. The process of change for teachers in the Pilot was influenced by the opportunities that existed in departments for them to learn, reflect on their practice, try out and practise new approaches and work with and receive support from colleagues<sup>101</sup>. Our measure of department capacity came from teacher survey items on collaboration within subject departments, subject leadership of and support within departments, and the role of the head of department and department colleagues in

98 Percentages do not always add to 100, due to rounding.

99 See Annex D.

100 Stoll, L., Fink, D. and Earl, L. (2003) op cit.

101 We discuss these in sections 6.2 and 6.3.

supporting the Pilot's implementation<sup>102</sup>. Our analysis showed that the 20 schools with a sufficient number of teachers completing the survey to create a school response were divided into three groups on this factor: high (with most favourable teacher ratings of their department), medium and low capacity (those with the poorest department ratings).

Significantly more teachers in self-rated high capacity (72%) and medium capacity (66%) than low capacity departments (49%) felt the Pilot had led them to set more challenging targets for their pupils<sup>103</sup>.

### 6.1.3 Factors Influencing Change

Our research identified several factors influencing teachers' and schools' experience of trying to change practice.

#### Time

One of the strongest messages was the importance of time if meaningful change was to occur. Creating time was an issue for virtually all of the schools, and was particularly difficult in a period of teacher recruitment and retention difficulties. Almost all of the survey respondents reported that it had been difficult to find time to develop practice, and just under two thirds (65%) of the school strategy managers cited time as a key challenge their school was facing. Even with funding in Pilot schools for supply cover, time was viewed as a difficulty. Schools and LEAs reported many different consequences of limited time, all of which restricted people from having "time to do things properly" (school strategy manager).

#### Time limitations affected:

- Planning
- Monitoring
- Co-ordinating and managing work
- Timetabling
- Dissemination
- Sharing
- Developing and deepening practice within departments
- Whole school and cross-departmental discussions
- Embedding new learnings

During case study visits, strategy managers and strand leaders who supported the Pilot and Strategy ideals were, nonetheless, vociferous in their concerns about time pressures hampering implementation. Some schools were also concerned about loss of classroom time when teachers attended training.

Some schools were finding ways to create time for Pilot activities. For example, one created extra non-contact time for two people in each department for a morning each fortnight for curriculum development, and another tried to ensure that no members of a particular department would be called on for cover during a specified period each week to enable them to meet, plan, share and develop practice. However, in our case studies we did not come across examples of schools rethinking traditional school organisations – for example 'one teacher–one class' teacher deployment – as avenues to find the time required to promote teacher learning<sup>104</sup>.

There were also concerns from more than two thirds (69%) of implementation survey respondents (school strategy managers) and over half (53%) of the LEA survey respondents about the pressure of the timetable for implementing each strand. Concerns were expressed that rushed timing might affect ultimate success and sustainability, and that change takes several years<sup>105</sup>: "They have to keep focusing on the KS3 Strategy for at least three years to embed it, and not let go of it . . . It must be embedded, not overtaken" (KS3 school strategy manager). Teachers and school leaders were also concerned about the pace of change:

*Unless you're giving me time, I don't see how you can move forward. I enjoy doing all this but there are times when I wish I had more time (history teacher).*

*You can't rush improvement. The pace of change can be forced but there is a cost (headteacher).*

Even the keenest of staff needed time to work through different stages:

*In the first half term people were trying out lesson starters, the three-part lesson, trying to familiarise themselves with the framework, getting it wrong, learning different language, looking at the programmes of study, starting to lesson plan using the detailed lesson plan structure, struggling with the 50-minute lesson and saying "there's no room". In the second term they were starting to say: "It's possible"; "I did a good lesson"; "The*

<sup>102</sup> These items grouped together in factor analysis.

<sup>103</sup> For all further department capacity issues, see sections 6.2.7, 6.2.8 and 6.3.3.

<sup>104</sup> More radical changes to use of time have been suggested by Clive Dimmock (2000) in *Designing the Learning-Centred School* (London: Falmer Press), including offering more flexibility for groupings of different sizes by introducing flexitime for teachers, restructuring the curriculum to cycles of six to nine days, dividing the school day in parts, so that one-teacher-per-class activities take place in one half and whole-school or sub-school activities take place in the other.

<sup>105</sup> See Fullan (2001) op cit. This is also acknowledged in the management guide for the national roll-out.

framework has loads of good ideas". They were starting to get on the Internet on the Standards site, talk to each other and other schools, more maths meetings were spent talking maths and ways to teach . . . (head of mathematics).

People are still getting their heads around the objectives and planning (literacy co-ordinator, speaking about English, November 2001).

## The language of change

Some teachers appeared to be affected by the language used to introduce Pilot changes. Most significantly, a principle of the Strategy is 'transformation'. The intention of policy makers and the national team was to transform the teaching and learning of an entire school system, but this was interpreted by some as 'transforming' individuals, which they found offensive. For example, a head of science viewed as successful within his school, felt his whole approach to teaching had been called in to question, was demoralised by the Pilot, and insulted that anyone should use the word 'transformation' to refer to changes in teachers' teaching practices. Our research suggested that the reality of change in the Pilot schools was much less dramatic, with people adapting their teaching approaches, trying out new ones, seeing how they fit their pupils in their own context, and adjusting them. Teachers in some schools mentioned a training course they found useful because it referred to this process of change as 'tweaking'; that is "making small but significant changes rather than a complete overhaul"<sup>106</sup>. This appeared to fit with the deliberate approach of some of those in schools leading the Strategy or strands to bring colleagues on board, described by three of them as: "slight adjustments" (school strategy manager), "easy does it" (head of science), and "challenging in a non-threatening way" (head of humanities/TLF lead teacher). It concurs with findings elsewhere suggesting that if challenge is too high and skills are low, people feel anxious about change<sup>107</sup>. The difficulty with this, however, is that some teachers who might benefit from introducing new teaching and learning strategies might not feel sufficient impetus to do so. It suggests the need for a more differentiated approach.

Another language issue relates to the perceptions of flexibility. While several Pilot documents acknowledge in the headteachers' and teachers' notes that schools may wish to vary activities or priorities, the language on the overheads contained in the pack comes across as more prescriptive. It was possible, therefore, for teachers not involved in presenting the materials to think that there was no flexibility.

## Behavioural issues

In our pupil survey a significant percentage of Year 8 pupils reported that other pupils' bad behaviour disturbs my learning. Dealing with pupil behaviour difficulties was a greater issue in schools in certain areas than in others, and for some teachers than for others. It was a hard decision for some schools weighing up the short-term 'pain' of releasing teachers to go on training and covering their classes with supply teachers who faced difficulties dealing with challenging behaviour, against the potential long-term gain. As they tried out new teaching and learning approaches, a considerable number of teachers found that 'it gets worse before it gets better' – the implementation dip<sup>108</sup>. In addition, some of the more active teaching and learning approaches required confidence in dealing with classroom management. These issues affected pupils' behaviour in some schools, especially in the earlier stages. Consultants in some LEAs reported that they were being used as "firefighters", and in a couple of schools we visited senior leaders were concerned about how teachers were handling pupils' enthusiasm for some of the active lesson starters.

Some teachers had found that appropriately targeted learning in terms of challenging (but not too challenging) learning objectives – a feature of the Strategy – was a key to improved (teaching and) learning which then impacted on behaviour. This was seen to apply for both high and low achievers in both addressing and preventing behavioural problems and increasing engagement.

**It's a vicious circle – if we teach and kids don't know why they're doing something then this leads to poor behaviour and teachers can't do anything/teach. They get ground down and respond with poor behaviour (head of history/TLF strand leader).**

## Workload and emotions

We came across some teachers who were struggling with the process of introducing new teaching and learning approaches. The emotions are frequently underplayed but can be a powerful force that affects teachers<sup>109</sup>. The Pilot took place during a time when workload issues have been of great concern and have been investigated by the Government<sup>110</sup>. Even the most enthusiastic pilot schools were concerned about the sheer workload involved in the Pilot and the combined workload effect of being involved in a large number of initiatives. A deputy head in one school, reflecting on the extent of involvement of young teachers,

106 Hughes, M. with Potter, D. (2002) *Tweak to TRANSFORM*. Stafford: Network Educational Press. p 45.

107 Csikszentmihalyi, M. (1990) *Flow: The Psychology of Optimal Experience*. New York: Harper & Row.

108 Fullan, M. (2001) *op cit*.

109 Hargreaves, A. (1998). 'The emotional politics of teaching and teacher development: with implications for educational leadership', *International Journal for Leadership in Education* 1 (4): 316-336.

110 Price Waterhouse Coopers Teacher Workload Study: Final Report 5 December 2005 see [www.teachernet.gov.uk/-doc/932/ACT19E2.doc](http://www.teachernet.gov.uk/-doc/932/ACT19E2.doc)

expressed concerns about how hard these teachers were working, and pressure they were under: "These initiatives are being carried through on the backs of extremely talented young teachers. I don't know how long this can be sustained."

In small schools we heard of pressures on staff with multiple roles having to attend multiple meetings, and teachers who already had a number of responsibilities taking on Pilot responsibilities and finding these hard to juggle – "some of them ask, 'who am I today?'" (head of science) – and emotionally taxing:

**It is very easy to feel like you have been run over by a steam roller. Too much is pushed too quickly and you are quite likely to feel as if you are not doing anything properly (school strategy manager).**

### Competing initiatives

The KS3 Pilot was only one of many initiatives in which schools were involved, and during the Pilot period others were introduced or being discussed, for example the Green Paper on 14-19 and 'A' level examination changes. Several schools expressed concern about this innovation happening at the same time as other changes, and felt that these produced an added burden. Of greatest concern were the stories we heard in a few schools we visited about the cumulative effects of excessive workloads, described by one school strategy manager as "work encroaching on private lives to unacceptable levels" (school strategy manager), and quantified by another as: "a 70-75 hours a week job, which is hard to come to terms with". It is well charted in the school improvement literature that if schools are faced with competing practices, there is a danger that embedding of changes will be threatened.<sup>111</sup>

A few LEA staff line managing core subjects also expressed a concern that national imperatives for target setting would lead to teaching to the test which they thought could be counterproductive to the Strategy's focus on teaching and learning if it led to a narrowing of teachers' repertoire.

### 6.1.4 Early Impact

We did not find any particular Pilot teaching and learning approach that appeared to 'work' for every teacher. Fullan (2001) argues that "even moderately complex changes take from 3 to 5 years"<sup>112</sup>. Our research suggests that, after one year of the Pilot, and a further year for English and mathematics involved in the national roll-out, practice had already changed for some teachers and was beginning to change for some others.

Of those responding to the teacher survey, more than three-quarters (79%) agreed that the KS3 Pilot has had benefits for my teaching while almost all (92%) of the school strategy managers who completed the implementation survey felt that their school had experienced at least some success in strengthening KS3 teaching. Our research highlighted four particular changes that we have grouped under the headings raising expectations, extending teachers' repertoires, increasing reflection on teaching and learning, and promoting focused discussion about teaching and learning.

#### Raising expectations

School effectiveness research consistently finds a relationship between high expectations and pupils' progress, development and achievement<sup>113</sup>. A Pilot and Strategy principle is: "establishing high expectations for all pupils and setting challenging targets for them to achieve". The Pilot's focus on objectives was intended to support teachers in raising expectations. For the most part, case study and other visits suggested that objectives were focusing teachers' work more clearly: "The sharing of objectives has helped particularly boys and staff to think about why they are doing what they are doing" (head of English). Sometimes this was because objectives had made them realise that expectations were previously too low. As a head of science noted: "We've pretty much accepted that we underestimated what kids could do at KS2". At other times departments and schools were responding to external pressures: "The English department now feels under more pressure to deliver results" (headteacher); "We have had the pressures of a dip in results and competition from other schools so I am target setting very closely" (headteacher).

111 Miles, M.(1986) Research Findings on the Stages of School Improvement New York: Center for Policy Research, mimeo: Hopkins (2001) op cit.

112 Fullan, M.(2001) op cit.

113 Teddlie, C. and Reynolds, D. (2000) op cit.

Early on, some schools and LEAs appeared to be struggling with target setting, either setting targets that were too high or low in the first year, or finding the data they had was inadequate. Most case study schools were using target setting for their pupils, a process that generally pre-dated the Pilot. Schools with greater prior experience of target setting found the task more straightforward. Some used the Pilot to move towards more individualised pupil targets, and to ensure the pupils were part of the process, raising their aspirations of what they could achieve: "We need to be explicit to pupils how we're building on what we know" (head of geography/TLF strand leader). The planning process also appeared to help some teachers plan more appropriately challenging lessons.

More than half of those responding to the teacher survey (59%) felt the Pilot had led them to set more challenging targets for their pupils, although this average percentage conceals variations. For example, more teachers in schools with high levels of free school meals reported changes in expectations<sup>114</sup>. In addition, considerably more teachers involved in the TLF strand (86%) than mathematics (57%), English (54%) or science (51%) teachers thought that the Pilot had led them to set more challenging targets. It could be, of course, that many teachers already had high expectations, but it appears that the Pilot had an impact on a considerable number.

The raising of teacher expectations also appears to be reflected in a relatively high level of agreement (74%) with the statement: teachers in this school believe all pupils can be successful. Over the last decade, this item has been included in a number of other surveys of teachers of pupils in the middle years, with significantly fewer teachers agreeing with the statement<sup>115</sup>. It appears that the Pilot, in combination with other initiatives, for example target setting may have had a positive impact on raising expectations, particularly in relation to lower attaining pupils.

## Extending teachers' repertoires

An aim of the Pilot was to extend teachers' repertoire of teaching and learning approaches. Our surveys and visits suggest that some teachers, at least, had incorporated a number of Pilot teaching and learning approaches in to their repertoire, and some others were beginning to do so. The picture varied across the schools and from teacher to teacher but there were indications that the following aspects of some teachers' practice had changed or were changing:

### Greater focus on clear learning objectives and processes

The Pilot's emphasis on learning objectives appeared to have led to a decrease in focus on activity-based planning for some teachers: "Teachers have moved their focus from what they are doing to what they are teaching and what pupils will learn" (LEA strategy manager). Learning objectives appeared to give some teachers a better understanding of the link between activities and their outcomes. For a number, greater clarity had also come through the process of sharing objectives with pupils.

Some teachers were being more explicit about what needed to be achieved as an end product and the thought processes that would accompany this. As an ICT line manager described it: "Emphasising and making explicit knowledge and skills being taught. For example, it's no good reading a horror story and then saying 'write one'. You need to be explicit about what makes a good horror story. This 'making explicit' is a step towards metacognition".

### Greater use of approaches to increase pupil input and involvement

Through investigative work, modelling, assessment for learning, thinking skills and the use of questioning, teachers appeared to involve pupils more in activities where they had to discover things for themselves: for example, a science strand leader describing how teaching was now geared towards motivating all pupils by allowing more independence and more open-ended work in KS3; and an art teacher looking at thinking skills. A mathematics consultant, however, cautioned that while interaction between teachers and pupil and between pupils had improved in many cases: "it is still sometimes scary for teachers to encourage pupil-pupil interaction".

<sup>114</sup> See section 6.6.2.

<sup>115</sup> Muschamp, Y., Stoll, L. and Nausheen, M. (2000) Learning in the Middle Years, in C. W. Day and D. Van Veen (eds) Educational Research in Europe Yearbook 2001, Leuven, Belgium: Garant. McCall, J., Smith, I., Stoll, L., Thomas, S. Sammons, P., MacBeath, J., Boyd, B. and MacGilchrist, B. (2001) op cit.

A considerable number of teachers indicated that they were now more aware of differences in pupil learning styles, although for many of these, involvement in other learning initiatives had provided some of this information. They were seeking to provide differential opportunities to meet the needs of their pupils as they became more comfortable with the key elements of the initiative.

Several teachers showed an increased awareness of the role of assessment in supporting pupils' learning. Substantial effort was being put into the development of systems to track the progress of individual pupils, and to use assessment information to diagnose strengths and weaknesses in current learning and to support future learning. Through focusing on assessment for learning, a number of teachers appeared to be more aware of how to use data obtained from pupils in lessons – getting and using assessment, seeing progression, and knowing that pupils were meeting objectives:

Assessment is not just giving a mark but identifying problems so you can set targets (mathematics teacher).

My own teaching and thinking and questioning have improved through assessment for learning: assessing key pieces of work and having better target-setting. . . I set better short-term targets. My teaching is more formative (school strategy manager).

We heard a few stories of how pupils could now evaluate what they have done against learning objectives, and others of teachers who had learned how and why to set targets "and the proof of doing it".

Some teachers appeared to be thinking more about questioning, using more open questioning, high quality questioning and higher-order questions. Others had developed modelling skills:

The modelling of writing opened so many doors for me . . . The idea of talking your way through a piece of writing, particularly the drafting. When you do that it's so good. Kids see you crossing things out for the first time and writing over them. Then you can take from your draft to a final piece of work. I think that's been brilliant . . . That's something I've learnt. I always thought I was doing modelling but I had my back to them . . . I was didactically writing stuff on the board. Now we are actually all engaged together (head of English).

## More structured lessons

Pacing of lessons was a key issue the Pilot had set out to address. For this reason, the Strategy broke the lesson down into different parts: a short starter activity which might, but did not have to be, linked to the rest of the lesson; the main teaching part; and a plenary, intended to draw out what the pupils had learnt. The three-part lesson was alien to many teachers initially, but was seen as providing a more structured approach to classroom teaching. Teachers were aware that school inspections were focusing on these aspects of lessons, and this was a factor providing pressure to implement them effectively. The structured lesson was seen by some teachers as helping in achieving lessons with a clear focus that were better structured, and a number noted it had also improved variety and pace, although a number of consultants and line managers commented that the plenary was still not being used effectively by a considerable number of teachers.

## Increasing reflection on teaching and learning

The Briefing for Pilot Schools (2000) highlighted that one of the indicators of success would be that reflection on teaching practice becomes the norm. Most teachers surveyed (81%) felt the Pilot had given them an opportunity to learn more about their own practice, and a number of teachers we met talked about being more reflective and the benefits of this, although this seemed more prevalent among subject and strand leaders than their colleagues:

It has made me question my teaching strategy (head of art/TLF strand leader).

It has made me look more deeply (head of mathematics).

It has definitely made me think and reflect (head of geography/TLF strand leader).

It makes you as a professional think 'how have I done it with my class?' (head of science).

It made me think about what I was doing and perhaps I could do some more (D+T teacher).

The benefit of reflection was endorsed by several LEA staff, who had observed that some teachers appeared to be clearer about why a lesson had gone well. For others, it had made them evaluate and re-visit what they were doing. As one English line manager commented:

It's a wonderful opportunity for people to look at their practice and make it better. Anything that helps them to reflect on their craft should be welcomed with open arms.

## Promoting focused discussion about teaching and learning

Two thirds (67%) of the teachers completing the survey believed that the KS3 Pilot has led to more focused staff discussion about effective teaching and learning. This was particularly true for teachers who reported that their school had taken a whole-school approach to implementing the Pilot, and for those in high capacity schools. In addition, significantly more teachers reporting that the Pilot had led to more focused staff discussion also thought it had led to more collaborative work in their own department.

Some schools and teachers paid particular attention to the kinds of 'hooks' likely to draw colleagues together in the focus on teaching and learning within their own school context. For example, for their TLF INSET days, two case study schools deliberately chose to use their own video material rather than training videos to maximise the potential and transfer of TLF elements in their school, with positive responses from colleagues.

## The depth of change

Our evaluation found relatively few indications that deeper changes in understanding of subject knowledge were taking place. Some consultants thought the teachers they were working with were less far advanced in their use and understanding of Pilot teaching and learning techniques than the teachers themselves thought. Some described how most schools were tending to use the practical examples section of the frameworks without getting to grips with the section focusing on effective teaching.

One reason that some schools appeared to favour the TLF strand was that, through their own commitment to the topic they chose to pursue within TLF, they seemed to be probing deeper:

**Literacy and numeracy are blunt instruments: "this is the way it is". Our head of geography is gaining an understanding of thinking skills that's much deeper (school strategy manager).**

## Variations within and between schools

The extent of the focus on teaching and learning varied within and between schools. Where both teaching and learning were the focus and there was also a whole-school focus, the impetus for and of change appeared to be greater. Furthermore, while most of the common structures appeared to be in place by the end of our evaluation, there was wide variability between schools and teachers in their use. For example, in one pilot school the structured lesson was a feature of almost all teachers' lessons throughout the school (with a poster about it in every classroom) whereas in another we were told that: "staff were now aware of it, even if they weren't using it".

A few schools were involved in more radical changes, affecting the curriculum. One was planning to redesign its curriculum structure to enable assessment across the whole school at the end of every 10 weeks, in order to track pupils' progress and promote assessment for learning. Another was involved in another learning and teaching initiative crossing curriculum boundaries where Year 7 pupils spent 12 hours a week with the same teacher and teams of teachers were jointly planning the pupils' curriculum.

Teachers, too, varied. Given differences in individual capacity, it is not surprising that our results suggest that for some there was little change, but other experienced a much greater change. We encountered the entire range from teachers who engaged with teaching and learning in the Pilot, altered their practices and were "refreshed"; through to those for which occasional compliance with the structural elements (for example the structured lesson) when being observed, constituted change: in reality, no change.

## 6.1.5 Summary

Changing teaching and learning emerged as a key theme in our evaluation. Teachers, departments and schools varied in their readiness and capacity for change. Despite a number of obstacles, particularly time constraints, there was evidence that practices were beginning to change as teachers extended their teaching and learning repertoires. There also appeared to be greater reflection on, and staff discussion about, teaching and learning.

## 6.2 Supporting Change

One of four principles of the KS3 Pilot and Strategy has been transformation to: "Strengthen teaching and learning through a programme of professional development and practical support" (Pilot documents). The support provided nationally, regionally, locally and within schools has been a critical feature of the evaluation, with major investment in training, materials and consultancy support. Investment on this scale is unusual<sup>116</sup>.

### Key findings in supporting change

- The basic infrastructure for implementing the Pilot was in place in schools and LEAs.
- Schools welcomed the financial support for the Pilot.
- The Pilot was characterised by high quality materials; the DfES made improvements in response to feedback from teachers.
- Training to promote changes in teaching and learning was generally found useful.
- There were problems with release which adversely affected teaching in some schools, and with time and skills for cascading training. Some schools and consultants had concerns about training methods.
- Most consultants provided valued challenge and support to improve teaching and learning, especially where they worked in classrooms and were sensitive to individual teachers' and departments' learning needs.
- The introduction of improvement contracts was bringing further clarity to the role of consultants.
- Departmental colleagues provided valued support for teachers.
- Coaching was being used with positive results in some schools and LEAs.
- Wider networking has potential which was not fully realised during the Pilot.
- Some LEAs developed a closer relationship with schools than others.
- Consultants and other LEA staff needed their own strong support systems.

### 6.2.1 Infrastructure and Funding

The initial expectations of schools in the Briefing for Pilot Schools (2000) involved commitments of the senior leadership team, appointing a KS3 school strategy manager, attending training events, running summer schools, linking with KS2 teaching and data, target setting, and taking the optional and progress tests. The central support, not least in the form of funding, ensured that the structural and procedural features of the implementation (e.g. appointing a strategy manager, summer schools, taking progress and optional tests) were put in place. We found that other features of the Strategy such as catch-up and booster classes had also been introduced into Pilot schools, unless staffing shortages had delayed implementation.

There are many examples internationally of reforms being introduced without the funding to support them. Most of the people we interviewed in schools and LEAs viewed very positively the Government's investment in the Pilot. Headteachers valued the flexibility to allocate funds. It appears from this evaluation that the resources and personnel explicitly linked to the initiative have laid foundations with the potential for wide-scale improvement. There were concerns however, that similar levels of funding would not be available for schools involved only in the national roll-out, and two headteachers in National roll-out schools we visited in less well-funded LEAs expressed concern that participating in the roll-out was financially challenging.

### 6.2.2 Materials and Frameworks

An extensive range of high quality resource material was produced, including print, audio visual and computer software. Most (80%) of the strategy managers responding to our implementation survey were positive about the quality of training materials, and three quarters (75%) felt the materials could be adapted to their school's needs. Teachers were more mixed in their responses, although those we spoke to were generally positive and appreciated having materials to support their planning. We received mixed responses about the value of the frameworks, with mathematics teachers generally finding them very useful while English and science teachers were more divided. There was a degree of scepticism about the classes depicted in training videos, because some teachers did not think that the videos represented or addressed the kinds of pupil behaviour issues they faced in their classes.

116 Cohen, D. and Hill, (2001) Learning Policy: When State Education Reform Works Yale University Press.

The Pilot auditing process was also frequently found to be valuable, although time consuming. This has been taken into account in the roll-out, and the process was considered to be considerably less demanding, while still generally useful, by those who had experience of auditing in both the Pilot and in the roll-out. We heard many positive comments from schools on the process of carrying out audits, including that people found it interesting. The auditing process appeared to help strand leaders take a more reflective stance to their departments' work as well as formalising their priorities into writing. As one science strand leader described it: "important, helpful and powerful". Auditing as a part of the planning process has been found to be a valuable part of the improvement process<sup>117</sup>.

One of the main commitments that schools and LEAs had to make when entering the Pilot was that they would be 'guinea pigs' for the training, frameworks, other materials and assessments. This was a demanding task and schools and LEAs were sometimes concerned at the sheer volume of documentation being sent to them during the Pilot, its late arrival and other administrative difficulties. They were particularly appreciative, however, that the DfES was listening to their evaluations, feedback was taken seriously, and that the national team were responsive to their requests for changes. They could see their recommendations in print and had the satisfaction of knowing that they had influenced new materials and, in some cases, created them.

### 6.2.3 External Training

The effective implementation of the KS3 Strategy ultimately rests on teachers. In the Pilot and National Strategy, a major investment in training has been made to 'refresh' teachers' subject knowledge, enhance their teaching skills and strategies. Consultants and line managers, who had been trained by regional directors, delivered most of the LEA training, though a range of other trainers were used by the national team, LEAs and schools, for their specialist input, particularly on aspects of learning.

#### Positive training experiences

While the international research literature raises issues about the focus of external training on technical aspects related to policy implementation<sup>118</sup> and its potential for inducing dependency<sup>119</sup>, generally the training was well received, especially by those responsible for leading the Pilot in their schools. The vast majority (90%) of school strategy managers completing the implementation survey viewed LEA training as effective. Additionally, almost three quarters of heads of

department (72%) and others with responsibilities for KS3 in their department (72%) reported in the teacher survey that the training has prepared me well for teaching in the Pilot. School visits revealed a more complex, but generally positive picture, with almost universal praise for the LAC training, and generally positive reactions to the TLF and mathematics training, although more mixed responses in some schools for the other training. Discussions with teachers indicated that the most successful aspect of training was its focus on teaching and learning. When teachers and LEA officers told us the training had been effective, we asked them to identify what had made it effective (see box).

#### Effective training

- Conveying clearly, accurately and persuasively the central messages of the Strategy, so they could be heard, understood, accepted and translated into the classroom
- Thorough and meticulous preparation: as if trainers had designed their own training
- For school-based training, tailored the training to the context and the people
- Confidence and experience to know what ideas and materials would or would not work and why, also the skill to adapt them
- Personalised approach: "that doesn't look like it's being read from a script"
- Using practical examples and approaches connected to the classroom: giving ideas and resources
- Modelling effective teaching
- Creating opportunities for discussion and reflection; enabling teachers to share their good practice
- Using adult training approaches
- For sustainability, coaching and training others as coaches

Not everyone was positive about the training: over a fifth (21%) of the teacher survey respondents did not find training by LEA consultants effective, and more than a quarter (27%) did not feel it had prepared them well for teaching in the Pilot. There was some evidence of dissatisfaction with two aspects of training: perceived rigidity of some of the presentations, and reliance on cascade training.

117 Reezigt, G.J. (2001) A Framework for Effective School Improvement: Final Report of the Effective School Improvement Project. University of Groningen, The Netherlands: GION.

118 Day, C. (1999) op cit.

119 Hargreaves, A. (in press) Sustaining Teaching and Learning in the Knowledge Society. New York: Teachers College Press.

## 'Inflexibility' of training

In a national innovation, a concern for policy makers is retaining the authenticity of the original messages. The primary method chosen to ensure this was scripted training materials. Teachers, consultants and line managers indicated that this tightly defined and prescriptive material sometimes led to dull and stilted presentations, trainers reading overhead transparencies and limitations on participation due to heavy content and tight time-scales. Experienced teachers also found difficulty with the inflexibility of some inexperienced trainers, which gave the impression that the Pilot was a statutory requirement, rather than guidance. Criticism was sharper because the KS3 Strategy avowedly seeks to transform teaching and engage learners. Training which did not exemplify these principles gave discordant messages and alienated some teachers, and some consultants were also critical of training that did not model the Strategy for teachers.

## The cascade approach

There were criticisms of the cascade approach. These primarily concerned the lack of time, which was the major obstacle, and opportunity to cascade training adequately in schools. Several of those interviewed summed up the dilemma succinctly:

*I've seen the cascade model. A three-hour course is reduced to 15 minutes in the department. There are big changes that the ideas are meant to make, but the ideas are lost (mathematics consultant).*

*The cascade is drip if it's drip at all. . . If you want to deliver something you must give key people time and time to work with departments. I can understand schools where there are concerns with damaging ethos if teachers are away from the classroom. There's a difficulty in schools who have a structured timetable where departments only meet once a term (English line manager).*

*At its worst it's no cascade. At its best it's time to stand up and say, 'This is what I've been doing'. In the middle, there's a photocopy shared (head of science).*

*I come back all enthusiastic and fired up from the training but it loses impetus because of a lack of time to plan (head of art).*

*There's not time, ever, for the faculty to meet and disseminate. It's all done informally. . . A lot [of the training] gets lost because there's no time to disseminate (head of science).*

There was also a concern that trainees could be taken through a programme, given a folder and, thereby, be equipped to train others. The experience of some teachers suggested that strand leaders and their colleagues who

had attended the external training sessions had difficulties conveying the ideas to other teachers.

There was evidence that there were still a significant number of teachers who had barely been touched by the process and others who had only had limited contact. As one headteacher mused: "What if you're the last person in the cascade and you don't get wet?" Indeed, the more closely involved people were with leading aspects of the Pilot, the more they thought that training had prepared them well for teaching on the Pilot and that the Pilot had impacted on their practice, as Table 6.2A shows.

**Table 6.2A**  
Comparison between responses of teachers with varying levels of responsibility for aspects of the Pilot

	KS3 SM % agree (n = 25)	KS3 strand leaders % agree (n = 127)	Other teachers % agree (n = 198)
The training has prepared me well for teaching on the Pilot.	72	72	48
The Pilot has given me the opportunity to learn more about my own practice	92	87	75
The Pilot has had benefits for my teaching	92	85	74

## Demands made by external training

The KS3 Pilot and Strategy represent significant commitment to the continuing professional development of teachers. A strong feature of this commitment was the provision of funds to release teachers to attend training. We frequently heard, however, that Pilot schools were overwhelmed by what they saw as unreasonably high expectations and initially inflexible demands from LEAs that several teachers at a time, or even whole departments, should attend training, even though this was not the national team's expectation. Such demands seemed to create considerable pressure, particularly in small schools, and in contexts where supply cover was extremely difficult to obtain. The crucial issues were concerns about adverse effects on pupils' learning due to a lack of continuity, and deterioration in pupils' behaviour, particularly with supply teachers. There were also additional pressures on staff due to lack of or poor quality of supply cover. Over a third of school strategy managers responding to the implementation survey stated this as their key difficulty, making it the major problem experienced. The seriousness of this situation was captured well by a strategy manager from a school in challenging circumstances:

There were dark days ahead . . . when the full scale of the training impacted . . . In a school like this the worst thing you can have are supply staff. So the first year was marred by numbers of staff out on training and supply staff . . . You just can't get quality supply staff. In a school like ours . . . kids are lovely, but . . . they're different creatures when you put a supply teacher in front of them. We suffered and I had a lot of difficult times in the staffroom.

There was some feeling, partly because of difficulty of releasing staff to attend external training, but also because of a desire to have colleagues working together in school, that it was useful to have some outside input but essentially to do within-school training. Approaches taken to whole-school training days were often more successful where consultants planned the day with staff and coached them in presentation approaches, and teachers made a variety of presentations, related to their work in school, using varied groupings, methods, topics and media. The training appeared to be more effective when there were opportunities for reflection during the day, a period of experimental implementation, strengthened by coaching and support, followed by non-judgemental evaluation, refinement and development<sup>120</sup>. Among the most effective training activities observed were those where training and support were tailored to the needs of a department and differentiated according to the experience, expertise, strengths and needs of individual teachers.

### 6.2.4 The Role of Consultants

Consultants provided the central training on their specialist area or provided an input for a broader course, for example, approaches to assessment. They also provided school-based training for all staff departments, voluntary groups and individuals, through presentations, classroom activities – modelling, team teaching, observations and evaluation – and small group or individual discussions. The complexity and demands of their role were summed up by a school strategy manager:

Consultants need to have a very good knowledge base. Presentation skills are very important, as are the interpersonal skills to work with individuals, small teams and the whole staff. They must be able to enthuse others. They must have credibility and convince staff that they have stood in their shoes, they have been in their place, and they have done their job. They must be able to deliver on their promises and be problem solvers. When they enter a situation they have to identify the blockages in a team, identify and support the receptive ones and sideline those who are negative. They have to be able to encourage good practice and develop skills in other people.

Despite this complexity, our research suggested that support from consultants appeared to be the most effective element of the external provision supporting the implementation of the Pilot. At its simplest level, teachers were grateful for: "Somebody giving time and coming in to school". Most of those leading aspects of the Pilot in their schools were particularly positive about the help from consultants. Virtually all of the school strategy managers completing the implementation survey (95%) felt that consultants offered effective support and most (84%) thought that they gave effective advice on practical classroom strategies. Over three-quarters (77%) of the heads of department responding to the teacher survey viewed their consultant's support as effective, in comparison with 68 per cent satisfaction overall.

We looked at a group of items on the teacher survey related to the Pilot's impact (see Annex D) and compared schools where responses indicated that teachers felt there had either been high, medium or low impact on individual and collective practice in the school. Those in high impact schools consistently rated consultancy support as more effective (see Table 6.2B). It was clear, from all of the visits, that the nature, amount and, particularly, quality of support from LEA consultants was critical. Where this was positive, teachers were often energised and, where they lacked confidence, they felt able to try out new methods. By contrast, where this was seen as less effective, reactions varied, depending on whether the department and teachers thought they already had or lacked the necessary expertise.

**Table 6.2B**  
Comparison of responses of high, medium and low impact schools to support from consultants

How effective have the following been?	High (N= 68 teachers)	Medium (N= 88 teachers)	Low (N= 68 teachers)
% teachers agreeing			
Training from consultants	86	71	55
Support from your LEA consultant	83	70	59
Consultant advice on practical classroom strategies	75	65	49
Demonstration lessons and feedback	68	62	43

120 See, also, Joyce, B. and Showers, B. (1982) The coaching of teaching, Educational Leadership 40 (1):4-16.

## Consultants' interpersonal skills

It was evident from our discussions that the success or failure of consultants' work was strongly affected by their personal qualities and interpersonal skills<sup>121</sup>. Irrespective of their technical competence, if they were unable to relate to teachers and to work in any situation presented to them, their influence would be minimal. Schools and LEAs identified a number of key interpersonal skills of effective consultants.

### Effective consultants: interpersonal skills required in every aspect of their work

- Ability to build relationships: listening; being friendly; approachable; dependable, trustworthy, good humoured; encouraging; supportive
- Discretion; confidentiality: "I carry around the 'secrets' of teachers, subject leaders and senior managers"
- Being ready to learn from others; being open-minded and honest; presenting themselves as a learner: "not as an expert – even if you think you know more"
- Enthusiastic, passionate, inspiring – able to take others with them; setting the tone for the work and expectations
- Adaptability; flexibility, creating 'windows of opportunity'; knowing when to move on
- Sensitivity to the pressures that teachers face: "Empathy, but not to the point of saying there's nothing to be done!"
- Seeing something as a challenge and being ready to challenge others.
- Team work; working with people and not against them; using inclusive language: "What do you think we can improve?"
- Problem solving: creativity, initiative, resourcefulness
- Negotiating skills: patience, diplomacy, realism

## Consultants' pedagogical skills

A distinctive feature of the work of consultants in this Strategy was their commitment to working in the classroom. Research indicates that educators are likely to judge training about teaching by making an assessment

of the source's credibility and judge the message by the messenger<sup>122</sup>. It was perhaps no surprise, therefore, that most teachers and LEA officers said that a vital experience for effective consultants was successful teaching. School strand leaders and senior leaders sometimes also emphasised the need for consultants to have leadership and management experience, primarily, but not exclusively as a subject leader. These two areas of experience were valued above others, though training experience was also mentioned. A range of other pedagogical skills were mentioned that would be applicable in all aspects of the consultants' work.

### Effective consultants: experience and pedagogical skills required in every aspect of their work

- Good classroom teacher; management experience; experienced trainer; working with teachers in classrooms; joint planning and team teaching; modelling effective teaching; observing lessons and offering feedback to improve performance
- Sharing 'how to' with teachers and subject leaders; providing advice on skills, aspects of the subject and management
- Understanding how people learn
- Understanding how change takes place; sensitivity to the needs of individual schools and the pace of change; supporting and challenging people to advance
- Clear understanding of roles and responsibilities
- Understand educational theory, the principles of effective teaching and learning, and the pedagogy behind the strategy; to say what works and why
- Knowledge of the curriculum and subject; application of subject knowledge across the curriculum
- Analysis of the curriculum and teaching materials – extensive preparation and gathering of examples/illustrations
- Modifying materials and approaches for teachers, departments and schools without losing the central message
- Ability to adapt ideas to the specific context and improvement foci of schools

121 Miles, M., Saxl, E. and Lieberman, A. (1988). What skills do educational "change agents" need? An empirical view. *Curriculum Inquiry*, 18 (2):157-93.

122 Huberman, M. (1995) Professional Careers and Professional Development: Some Intersections, in: T. R. Guskey and M. Huberman (eds) *Professional Development in Education: New Paradigms and Practices* New York: Teachers College Press; Cousins, J. and Leithwood, K. (1993) Enhancing knowledge utilization as a strategy for school improvement, *Knowledge Creation, Diffusion, Utilization*, 14 (3):305-33.

## Stages of consultancy

The way consultants 'gained entry' to Pilot schools and established what they would be doing was important in setting the tone for the whole process. It was difficult because all consultants were new and the role had just been created and was still ill-defined for schools. Roles, parameters and purposes had to be clarified, and this proved easier in some schools than others. These were followed by visits and requests to spend time in classrooms. In this early stage, it appeared that effective consultants used a mixture of analytical and interpersonal skills to understand the school's context and special circumstances, relate well to the school, and to establish a sound basis for the relationship.

The next stage for many of the consultants – helping strand leaders with audits – appeared critical in ensuring that the work was effective, through accurate diagnosing of the situation, discerning strengths and weaknesses, defining development areas and ensuring an effective action plan. The audit process provided important information for the consultant. Several consultants found that focusing on a small number of actions appeared to be more successful. They went about the process in different ways, often taking time to find more effective approaches. A mathematics consultant, for example, found it more constructive to demonstrate approaches to teaching and learning to a department before carrying out an audit, to prevent them from defining their strengths and weaknesses from within their current frame of reference, rather than against that of the Strategy. A TLF consultant considered it necessary to work with a department before completing an action plan, rather than just deriving it from the audit. Similarly, an English and a science consultant advocated beginning a programme of improvement before finalising the contract their LEA had developed, in order to build lessons learned into the final contract. Some consultants indicated that improvement plans or contracts with schools were helpful in clarifying this stage.

In small LEAs, consultants had a continuing relationship throughout the Pilot and into the roll-out. In larger LEAs, with phased support for implementation, a few consultants spoke of the need to be aware of emerging priorities, identifying further needs, to ensure a clear ending of commitment, to agree follow-up work, as required, and establish the basis for a continuing relationship.

There was also some evidence of the role and practice of consultants changing over time. One LEA strategy manager indicated that consultants' work went through stages during

the two years of the Pilot, from 'tips for teachers, to 'here is some help to plan your scheme of work', to departmental training, to coaching'. He noted that consultants were working at all four levels. To some extent this was dictated by the developmental stage of the teacher or department.

## Work in classrooms

Consultants working in classrooms was a crucial element of implementation. School interviews indicated that consultants were likely to be viewed as lacking confidence if they did not go in to classrooms and teach lessons, even in the earlier stages of piloting strands when their brief was to help with auditing and planning. Similarly, teachers expected to see examples of successful teaching when they were observing consultants teaching their classes, and this did not always occur. Most teachers interviewed, however, spoke highly of the value of classroom-based activities, and 60 per cent of respondents to our teachers' survey found consultant advice on practical classroom strategies effective, but 20 per cent were uncertain about this and the remainder did not find it effective. In some cases, there was frustration about the limited amount of time consultants were able to spend in any one school: 'They need to be in schools more than they are, and to take a hands-on approach, sharing of practice. I would hope to see a consultant at least once a month. It's usually a snatched cup of coffee. No observation, no modelling of teaching ... The role needs defining more clearly (head of science).

In common with other findings related to strand differences, teachers involved in the mathematics and TLF strands found support from their consultant more effective than teachers involved in English and science<sup>e123</sup>. A considerable number of teachers in all strands, however, found that the model of consultants working with them, observing them, joint lesson planning, delivering lessons themselves, and planning further lessons together that the teachers delivered, was useful. As a Pilot activity, if it was skilfully carried out by the consultant, it also appeared to have a positive effect on teachers' practice:

**She's observed in school and has done joint observations with me. She gives feedback very much in terms of building on strengths so people don't feel threatened. She has modelled approaches to them and taught sections of lessons (head of English/strand leader).**

**The numeracy consultant is brilliant. She's practical, and has worked with virtually everybody (head of mathematics/strand leader).**

123 Numbers of ICT teachers were too small to analyse their responses.

Joint observations with a consultant A headteacher carried out some lesson observations with the TLF consultant commenting: "I was struck by the clarity of her thinking. As she talked through what she had seen, she had a model in her head of what's useful and recognised the strengths of what she sees and makes specific recommendations. I have changed as a result of working with her. I make recommendations at the end of lesson observations."

Interviews and observations suggested that more effective consultants had a good sense of timing around when to act and when to wait with particular teachers. They recorded and shared effective practice and used examples from the school to show what was possible "in your school, with your pupils." They also worked diplomatically within the departmental and school structures, and were sensitive to personality and 'political' issues.

An example of team teaching One consultant planned a series of lessons with a teacher which they were team teaching, to be incorporated as examples in the departmental scheme of work. The consultant acknowledged the teacher's greater understanding of the pupils and the school context, and her better knowledge of some aspects of the topic. The teacher seemed to value the consultant's wider experience of teaching and learning approaches. Both appeared prepared to try new approaches and to learn from the other. The dialogue between them was good humoured, involving robust discussion of purposes, content and methods, with a clear focus on engaging pupils of different attainment in stimulating and challenging classroom activities.

## Dealing with resistance

It was not unusual for consultants to encounter resistance from teachers. This required clear understanding, skill, tenacity and diplomacy to overcome. In one such situation, a consultant was persistent but patient, with just sufficient edge to challenge an assertive teacher without losing the relationship. It resulted in a mutually workable plan, but was a complex situation involving tense negotiation: "one which I've done hundreds of times" (consultant). In a brief reflection following the lesson, the teacher and the consultant were positive, highlighting the strengths of the lesson and their

reservations. The consultant later reflected that she was content with the outcome and the signs of hope: "This is a marathon, not a sprint."

Consultants were also sometimes faced with resistance from strand leaders. One English consultant, who faced vociferous opposition from some teachers who regarded the English framework as "reductionist" commented: "You have to have a clear philosophy... good grounding, understanding and educational theory to address this."

If the subject leader appeared to be blocking progress<sup>124</sup>, consultants frequently negotiated the opportunity to work with keen and effective teachers in the department: "the mover and shaker [who] is prepared to change their own practice" (science consultant). Sometimes, this approach was also blocked. A mathematics line manager indicated that an experienced head of department was blocking progress: "The consultant can't get access to the KS3 leader, an excellent teacher, so the excitement that could be generated by her is stifled by the department"

## Monitoring consultants' effectiveness

Some LEAs had a regular reporting system with, for example, consultants completing a sheet after every school visit, but others were more flexible, or gathered only anecdotal evidence of effectiveness during the Pilot. In recognition of the significant role senior leadership teams played, in some LEAs consultants were urged to link with senior leaders at the beginning and end of each specific stage of work, and to summarise progress and report succinctly to schools during, and at the end of, their involvement. By establishing links with the school strategy manager and senior management team consultants were able to encourage and assist senior managers to support and embed change across the whole school. Consultants were also enabled to see the 'big picture' and apply that to the departmental context. This was seen as valuable by a number of headteachers, although Strategy developments appeared to focus the consultant's role more sharply on supporting classroom practice.

The auditing process was useful in establishing the beginning of consultants' relationships with schools. The introduction of improvement contracts appeared to sharpen the consultancy process, emphasising the respective responsibilities of schools and consultants and providing clear criteria for the fulfilment and evaluation of the contracted commitment. Although contracts were still relatively new for most LEAs, most of those using them found they were leading to more purposeful use of time, and more careful consideration of entry and exit strategies.

124 See, also, section 6.3.3.

## 6.2.5 Coaching

Coaching, in which teachers observe each other's teaching and use it to discuss and trial improvement, appeared to be valued by those LEAs and schools that were using it. A few had experienced coaching as part of previous initiatives and they moved more quickly when the Pilot introduced it. We attended some coaching training in one LEA that was also attended by consultants from two other pilot LEAs. It was evident that the three LEAs were at different stages of readiness to introduce coaching. One LEA was incorporating coaching into other LEA initiatives, while another LEA was still at the stage of "information sharing". Some LEA strategy managers realised early on that coaching had the potential to be a powerful process that would help "spread Pilot approaches", and some began to provide their own coaching courses for wider use throughout the LEA. Schools also varied in their responses. In some, there were already a few staff who had videoed their own practice and shared this with colleagues. One spent the last of its TLF funding training six coaches to sustain and expand on TLF developments, and others were training two or three coaches or including the person responsible for coaching on the KS3 management group. By contrast, others appeared concerned about release time or did not appear to have taken much notice of coaching.

## 6.2.6 LEA Support and Challenge

LEAs provided a wide range of support for Pilot schools<sup>125</sup>, including data, newsletters, and advice and guidance. Most pilot LEAs used local authority websites to present the KS3 Pilot and Strategy to the profession and the public. A few had very good features. They were up-to-date, engaging, very accessible, and easy to navigate, sometimes with navigation notes. They had links to national and local policies, key documents and resources, training information and newsletters, which can be downloaded. Links were also made to other LEA and Government initiatives, like Excellence in Cities, which are connected with the KS3 Strategy. Links were also made to Sharing Good Practice, on the DfES website. LEA contact personnel were clearly indicated. There were specific pages for teachers, parents, governors and teaching assistants. Some Pilot LEAs, however, produced web pages that were difficult to navigate, sparse and uninformative, or written in complex or technical language. Others were attractive but about the local authority or LEA, with little or no reference to KS3 and the technology used sometimes made them slow to load.

Link advisors and inspectors were also involved in supporting the Pilot in some LEAs. For example, in one, the termly advisor visit was devoted to LAC, to determine how far schools had implemented LAC programmes, their effectiveness and plans for the future. Another activity that LEAs set up for their schools was networking.

## Networking

The Canadian evaluators of the implementation of the National Literacy and Numeracy Strategies have noted how: "LEAs have fostered growing networks and communities of practice among schools"<sup>126</sup>. Networking is a particular form of support linking teachers or schools to share ideas, good practice, discuss and resolve problems and challenge each other's thinking. One American study of 16 educational reform networks found certain features created better growth opportunities: challenging rather than prescriptive agendas; indirect rather than direct learning; collaborative formats; integrated work; facilitative leadership; thinking that encouraged multiple perspectives; values that were both context-specific and generalised; and flexible structures<sup>127</sup>.

Almost two thirds (62%) of the strategy managers responding to the implementation survey reported that the opportunity to network with other schools had been effective and, while only just over a third (35%) of teachers who responded to this item on the teacher survey found networking with other subject colleagues helpful, almost a third (29%) were uncertain, and 105 of 361 respondents noted that this was not applicable to them, suggesting that networking was relatively rare.

During our case study and other school visits, most strand leaders mentioned that they valued the opportunity to share and learn more about learning issues from their colleagues in other schools. In particular, teachers in one-person TLF departments (e.g. music) especially valued the opportunity to get together with other music teachers to discuss TLF initiatives and practice. As one TLF lead teacher explained: "It's very valuable because we all take in something we use and we share. . . Without us knowing it the [TLF consultant] has moulded us in different ways. "With fewer consultants available, especially in large LEAs, networking may hold further potential for the national roll-out. Some consultants deliberately paired up teachers and departments in different schools as a means of helping teachers to change.

125 See, also, 6.3.6.4.4

126 Earl, L., B., Leithwood, K., Fullan, M., Watson, N. (2001) *Watching and Learning 2: OISE/UT Evaluation of the Implementation of the National Literacy and Numeracy Strategies*. London: DfES.

127 Lieberman, A. and Grolnick, M. (1996) *Networks and reform in American education*, *Teachers College Record*, 98 (1): 7-45.

LEAs also held regular network meetings for school strategy managers. These ranged from information-sharing and decision-seeking events to those where the school strategy managers brought along examples of activities to share with colleagues. These sessions were considered particularly valuable.

**Science Celebration Day.** Before the completion of the training for pilot science departments, teachers asked if they could continue to meet, so the LEA held a Science Celebration Day. Each department was invited to attend and to give a short presentation on their foci during the Pilot. These were submitted in outline in advance, and the day's programme was put together by the science line manager and consultant, grouping similar foci in each group of presentations. The aim of the day was primarily to share good practice developed during the Pilot.

Examples of foci:

- KS2/3 liaison: team teaching lessons in Year 6 in primary schools; carrying out a project in secondary exercise books whilst in Year 6;
- Assessment and monitoring: pupil involvement in assessing their own achievement and supplying evidence for meeting objectives.

The group of teachers had grown to value their work together as a group as well as the different foci. The science line manager for the LEA noted how the group had changed from being more competitive at the beginning of the Pilot to being a collaborative group.

## 6.2.7 Colleagues' Support

Within school training and support are critical as well. As much support as LEA consultants can give, it can never replace on-site support. This depends on the ability of strand leaders and others who attend the LEA training to be able to cascade the training effectively and provide quality support. Respondents to the teacher survey were particularly positive about support from departmental colleagues (80%). Support from heads of department was also seen as effective by three quarters (76%). Almost two thirds (64%) also felt there was an increase in collaborative work in the department as a result of the Pilot. While effective support from other colleagues in the school was mentioned by fewer than half

of the teachers (42%), considerably more teachers in the high impact schools (60%) than medium impact (38%) and low impact (23%) schools found the support of other school colleagues effective. This evidence, supported by that from case studies, indicates that where the focus of the Pilot was seen as primarily teaching and learning at a whole-school level, there was more cross-departmental collaboration than where the Strategy was understood principally as a subject-based innovation.

Schools used their training TLF days in a range of ways, including in one school where teachers had videoed their own music and history lessons to dissect with colleagues. Interviews with other teachers highlighted how they appreciated their colleagues' openness and how they had found it particularly valuable because the pupils in the video were their own pupils.

## 6.2.8 Capacity to Make Effective Use of Support and Challenge

The way support was used depended on the capacity of schools, departments and teachers. In a number of schools, consultants were very much in the driving seat, guiding the agenda with strand leaders, based on the audit. Elsewhere, confident strand leaders took the lead. For example, in one school the head of the science department had decided how she wanted to move things forward and how she would work with the consultant: "She made it happen ... After discussion with me, she looked to see how she could exploit my time as a free resource to her and her department ... The key is that schools should drive the Strategy not the Strategy drive the schools" (science consultant); "The head of department has used the Strategy as a toolbox to develop her department. The resources, whether central training, materials or consultant's time have helped her to develop the department" (school link inspector).

Some successful schools needed little support:

*In the highest achieving school in the LEA, a beacon school, the headteacher, the senior management team and others, recognised the priority of the KS3 Strategy and fitted it in to their own priorities. They have really taken off with TLF. Literacy Across the Curriculum is also an emphasis. They are encouraging English, maths and science to plan from the framework" (LEA strategy manager).*

In some cases, LEA staff felt constrained in their ability to challenge certain schools that did not want their support. These schools, as measured by external assessments, were seen to be providing acceptable levels of education. In the LEAs' view, however, they were coasting. LEAs are required to operate in accordance with a code of practice<sup>128</sup> that recognises schools' "front-line responsibility for raising standards" and LEAs' related role in supporting school self-improvement, through focusing their money and resources on schools that "need further challenge or support to secure improvement". There is a guiding principle that "intervention should be in inverse proportion to success", with successful schools earning autonomy but being 'expected' to invite the LEA to visit them at least once a year to discuss school improvement and target setting. The autonomy and distance this code of practice promotes, and the focus on schools in need, therefore meant that the LEA felt unable to challenge such schools in relation to their participation in the KS3 Pilot and Strategy.

### 6.2.9 National, Regional and Local Support for LEA Staff

People who provide support to help other people's improvement efforts, need their own support<sup>129</sup>. Nearly three quarters (72%) of LEA survey respondents were positive about their induction, though more than a quarter found it was not such a positive experience, particularly where there was no national or regional director for a strand. In addition, they felt overwhelmingly (94%) that the continuing support from their LEA was positive. Most respondents (81%) were positive about the regional training they received, and even more (88%) appreciated ongoing support from regional directors. Regional directors had responsibility for a group of LEAs, supporting consultants through network meetings, field visits and shadowing them. They also sometimes worked with consultants, collaboratively delivering training, and attempted to vary their support and monitoring strategies according to individual consultants' needs.

Some consultants expressed concern that they lacked consultancy skills<sup>130</sup>. Broadly, the role of line managers was to induct and support consultants, helping them to plan work and set priorities, monitor their work and help to resolve problems in schools, and collect and collate information and data for LEA reports. Guidance on this role was not available during the Pilot and line managers carried out this role in different ways. In some LEAs, particularly where consultants and line managers were both specialists in the same subject, they had strong links, providing mutual support and saw themselves as a "double act". Also, the consultant provided training and support for teachers whereas line managers provided strategic support or influence at senior leadership level, or supported the consultant when there were obstacles in schools. In other LEAs, there was a looser association between consultants and their line managers. Some consultants had formed their own support networks, among the LEA team or with a few subject colleagues in the region, or both. Most consultants felt well supported within their LEA, although some appeared to be more closely connected to the general work of the LEA than others.

National networking meetings were developed as one means of enabling feedback from schools and LEAs. We heard from a few consultants that these meetings sometimes did not meet their support needs, although they valued the opportunity to meet colleagues in similar roles. Part way through the Pilot, a website was developed to enable consultants to network with each other.

### 6.2.10 Summary

Support for change was critical to successful implementation. This involved a range of different support mechanisms, provided at national, regional, LEA and school levels. The work of consultants within schools was valued and teachers particularly emphasised the role of colleagues in providing needed support. Consultants also needed support for their role.

128 DfEE (2001) Code of Practice on Local Authority – School Relations. London: DfEE 0027/2001.

129 Lieberman, A. (2001) The Professional Lives of Change Agents: What They Do and What They Know, in F. O'Connell Rust and H. Freidus (eds) Guiding School Change: The Role and Work of Change Agents. New York and London: Teachers College Press.

130 This has been provided for the national roll-out.

## 6.3 Leading and Managing Change

Effective leadership and management are known to be associated with more effective schools and have also been identified as key to school improvement<sup>131</sup>. The KS3 Pilot placed considerable emphasis on direction at the national and regional levels, strategy and line management in LEAs and strategy management and strand leadership in schools. The focus on teaching and learning, curriculum frameworks and a related programme of professional development and support received more prominence in the earlier stages of the Pilot. Leadership and management, however, emerged as a significant theme in our research.

### Key findings in leading and managing change

- Headteachers' and school leadership teams' commitment to the Pilot and Strategy was important.
- Managing a growing Pilot was a challenge for school strategy managers and headteachers.
- Strand leaders played a vital role in the success or otherwise of their strands.
- New patterns of leadership emerged out of the Pilot. Sometimes these were very effective; at other times they were affected by conflicts within departments.
- Staff shortages and changes created difficulties for the leadership and management of change, as well as potential sustainability.
- LEAs had a key leadership, management and mediating role which most fulfilled well.

### 6.3.1 Importance of Headteacher and School Leadership Team Commitment to the Pilot

An expectation in the Briefing for Pilot Schools (2002) was that the Senior Management Team actively supports the strategy. The commitment of senior leaders to improvement initiatives within their school has been found to be key to subsequent success<sup>132</sup>. Discussions with a number of LEA strategy managers, line managers and consultants highlighted that their work with schools was made easier when school leadership teams were committed to and supportive of the Pilot. Visits suggested that commitment to the Pilot varied among the headteachers and other senior

leaders. For the most part, they supported Pilot ideals, as long as these fitted within where they felt their school was going. Two headteachers explained how they became involved in the Pilot in order to have an influence in shaping the national Strategy, and two others frequently referred to "the opportunity" the Pilot offered. There was also, however, some initial resentment among a few headteachers when told by their LEA that they 'had' to be involved. A number of headteachers acknowledged that KS3 had been relatively neglected in their school, one describing it as "the Cinderella stage," and almost all agreed something needed to be done. The extent of their involvement, however, appeared to vary, and the Pilot seemed to take on more of a whole-school teaching and learning focus in some schools than in others. In one school, staffing changes at senior level appeared to have affected commitment to the Pilot, and in another, the school strategy manager was unclear whether the senior leadership team were monitoring the strategy: "I think they probably are."

Focusing on whole-school improvement seemed to occur more often when school strategy managers had direct access to the headteacher and strong senior leadership team support. We heard from several school strategy managers that support from senior leaders was crucial, and in most schools we visited, the school strategy manager was also a deputy or assistant headteacher. Generally, support was greatest when senior leaders worked as a team, had linked responsibilities, and saw the connections to their own work. One school illustrated, for example, how the three deputy headteachers supported the Pilot because they saw it as helping other initiatives for which they were responsible: for example, social inclusion, out of hours activities, EAZ, KS4, and use of data: "Everyone has something to gain from this . . . Nobody is vying with anybody else" (school strategy manager). Conversely, a consultant commented about another school: "The concept of the team is not there . . . it's separate people doing things." In this school, implementation of the cross-curricular aspects of the Pilot – LAC, NAC and TLF – were particularly affected. Several respondents to the LEA survey drew attention to the importance of getting the senior leadership team on board at an early stage. As an English consultant noted:

**I don't think we tackled the issue of senior management involvement early enough. Senior management makes or breaks the initiative. No matter how hard departments work, it is the thoughtful, reflective, empowering senior management [that makes the difference].**

131 For example, Mortimore, P. (1998) *The Road to Improvement: Reflections on School Effectiveness*. Swets & Zeitlinger; Hopkins, D. Ainscow, M. and West, M. (1994) *School Improvement in an Era of Change*. London: Cassell; Stoll, L. and Fink, D. (1996) *op cit*.

132 Louis, K.S. and Miles, M. B. (1990) *Improving the Urban High School: What Works and Why*. New York: Teachers College Press; National Commission on Education (1999) *Success Against the Odds: Effective Schools in Disadvantaged Areas*. London: Routledge.

### Examples of senior leadership team commitment to supporting the Pilot

- Enabling subject and strand leaders to visit other schools, work together, observe teachers, video teaching, etc
- Encouraging teamwork between subject leaders
- Timetabling (more) regular department meetings or avoiding using staff in certain departments for cover on particular days
- Timetabling department staff for off-site sessions, working as a team with the consultant
- Having a teaching and learning starter activity at every staff meeting
- "Trying to develop a professional development culture in the school" (deputy headteacher/school strategy manager)
- Buying in retired colleagues to invigilate examinations to release other teachers
- Appointing a deputy or assistant headteacher with responsibilities for teaching and learning to co-ordinate initiatives and focus on the quality of teaching and learning across the school
- Talking to the strategy manager and to subject leaders on a regular basis about the Pilot and the 'bigger picture'
- Linking line management and performance management with KS3 activities
- Working as a team
- Releasing teachers for coaching: "an important way of spreading the ideas and encouraging teachers' learning" (headteacher)
- Headteacher attending cross-curricular workshops (e.g. LAC); seen by colleagues as an endorsement of literacy
- Teaching: "We should be exemplars of good practice" (assistant headteacher/school strategy manager)

The view from the teachers' perspective was mixed. Just over half of those responding to the survey (52%) reported effective senior leadership support for the Pilot<sup>133</sup>, while those more involved in leading and managing Pilot activities were considerably more satisfied: virtually all of the strategy managers (95%) were satisfied with support from senior leaders in their school.

Support from senior leaders for subject leaders. One school had three new subject leaders at the start of the second year of the Pilot. The headteacher gave them extra common non-timetabled time, for joint work, to attend subject leadership courses put on by the LEA, to visit other schools, and to spend time with a local Beacon school's department heads.

### 6.3.2 The Co-ordination Challenge: the Role of School Strategy Managers

Pilot schools had been informed in the Briefing to Pilot Schools(2000) of the expectation that: there is a named KS3 School Strategy Manager to act as a contact and to co-ordinate overall monitoring and evaluation. Most LEAs encouraged schools to assign this role to a member of the senior leadership team. More than three-quarters (79%) of the school strategy managers completing the implementation survey were also senior leaders, including four headteachers.

School strategy managers approached their co-ordinating role in different ways. Most held regular minuted meetings. A few others took a less formal approach. This was considered less than ideal by one school strategy manager: "We tend to meet when we need to... I think the whole thing would have a higher profile and be more evident if we had a chance to meet more regularly, on a quality basis. But that's been quite difficult". Some, often supported by the senior leadership team, saw it as an opportunity to bring staff together to focus on teaching and learning across the school. A few, however, appeared to struggle with this task, one noting that "it now needs somebody to pull it together into what we were aiming for at the end of this year, which is a teaching and learning policy".

133 A quarter viewed it as ineffective, while the remainder were uncertain.

We found that successful school strategy management appeared to include the following:

#### Successful school strategy management

- Confidence to work at a whole-school management level and perceived status
- Taking a cross-curricular perspective: "pulling it together" (headteacher)
- Focusing on impact in the classroom
- Willing to be involved in reciprocal observation
- Strong interpersonal and presentational skills – bringing colleagues on board: "helping us see what's in it for us: what are the opportunities?" (SEN teacher); "winning hearts and minds" (headteacher)
- Keeping KS3 high profile
- Accessibility
- Being good at identifying excellent practitioners who were influential with colleagues
- Bringing colleagues together to share good practice e.g. establishing and facilitating teaching and learning groups
- Monitoring the process and supporting the use of data to promote pupil learning

Many headteachers and strategy managers told us that at the Pilot's launch they had no idea how all-embracing, significant and demanding the Strategy would be. Some concluded from the introductory information and training that it was to be a curriculum development, an extension of the National Literacy and National Numeracy Strategies. This was summed up by one headteacher as: "It was literacy and numeracy, then it was science, then it became thinking skills, then it became this, then it became that. We did reach a point where we were thinking: 'Does anyone know where this is going?' It has taken shape since then". The intention of the phasing had been partly to make it easier for schools to manage the Pilot and most schools could see with hindsight that there may have been a coherent vision behind the Strategy. Many, however, felt that piecemeal presentation and implementation did not prepare them for the whole-school implications, or enable them to plan and structure their approach.

A consequence of this was that managing the Pilot and then the Strategy was added to the responsibilities of busy people. The Pilot's effectiveness was hampered in some schools by the inability of the strategy manager to juggle what had become a major role with other responsibilities. A headteacher described her difficulty in this way: "It is very difficult to find a leader for a strategy which will eventually be huge. You don't have someone waiting to take on something huge. You have to reshuffle responsibilities". Some schools used money from this initiative, and others, to fund an additional senior post, primarily to take responsibility for the Strategy, or temporary posts to absorb some of the strategy manager's other responsibilities while their main focus was the Strategy. The greatest difficulties were experienced by strategy managers who were inundated, for example in small or challenging schools, or where the person was unable to fulfil the strategy manager's role adequately because of constant pressure or unpredictable demands related to other roles they had in the school. There were also difficulties where the 'curriculum deputy' took responsibility for what was initially seen as a curriculum development initiative, but lacked the project management, professional or interpersonal skills to lead the staff in what turned out to be change in teaching and learning. In a few cases (only 9% of the implementation survey respondents), the strategy manager was a head of department, and some of these found it hard to cope with the cross-departmental nature of the role. In a few cases, we heard from the LEA strategy manager that school strategy managers had not previously seen key information such as the Autumn Package. The Pilot thus put pressure on leadership structures in some schools, while it appeared to be more successful where there was greater flexibility to allocate, delegate and absorb initiatives.

Changeover of school strategy managers after three or four terms of the Pilot was another challenge for five of the 12 case study schools, setting some schools back. Elsewhere, this created an opportunity for a fresh start, where previous strategy managers had found it difficult to cope with the role. Sometimes, however, new strategy managers found themselves having to take on an initiative with no background in it – for example one came from a non-Pilot LEA – while, in some cases, learning about deputy or assistant headship, which was also new to them. Some found that inadequate records had been kept about the Pilot. These new strategy managers had to "hit the ground running" although some, usefully it seemed, attempted to stand back, watching and listening to audit needs and spot enthusiastic and influential colleagues.

### 6.3.3 The Importance of Strand Leadership

Research on secondary schools' academic effectiveness highlights the importance of subject departments<sup>134</sup>, and in many schools, departmental or subject cultures differ from those of the whole school<sup>135</sup>. The subject leader can greatly influence the experience of teaching within their subject, and subject leadership is now recognised as an important factor in secondary school improvement<sup>136</sup>.

Pilot schools were expected to assign a leader to each strand; known as the 'lead teacher' in the case of ICT. They were also expected to have co-ordinators for LAC and NAC. Strand leadership involved: carrying out an audit, and producing a related action plan; participating in training with a colleague/colleagues, and disseminating this to other colleagues; preparing or revising schemes of work and creating short- and medium-term plans; and monitoring progress. While a management guide was produced for the National Strategy near the end of the first year of the Pilot, it was not available at the start.

Our findings suggest that the extent of success of a particular strand was, in large part, related to the effectiveness of strand leadership. Discussions with staff in several LEAs provided one source of support for this finding, summed up by one LEA strategy manager: "How successfully the strategy is being implemented and embedded depends on the leader of that subject area". Our case studies suggested that successful strand leadership included a range of characteristics. The particular blend of characteristics varied in subtle ways, but successful leaders appeared to possess most of them.

#### Successful strand leadership

- Supporting Pilot principles and strand philosophy
- Well respected by (department) colleagues: "The new head of English is fantastic. He shows appreciation of any strength, leading by example" (English teacher)
- Energetic and committed
- Good communicator and listener: "He informs all colleagues of what's happening" (maths teacher); "She keeps people informed and makes you feel part of the team. She doesn't filter information. She opens it up" (English and SEN teacher)
- Aware of the developmental needs of the department (school for LAC and NAC) and identifying the most appropriate people for training
- Understanding the change process: "understanding how transformation takes place" (ICT consultant)
- Effective use of the consultant, related to strand needs
- Effective use of data for target setting, monitoring and improving pupils' progress
- Observing lessons, facilitating peer observation and willing to be observed
- Using department meetings and other opportunities to promote sharing of ideas and information about teaching and learning approaches: "The more you do that, the more people are inspired to do that" (head of mathematics)

We asked teachers for their perceptions of the management of the Pilot within their departments. Approximately three-quarters (73%) of survey respondents thought that departmental management of the Pilot was effective.

The impact of subject leadership: A very experienced mathematics head of department approaching retirement, was highly respected by the staff and in the LEA, and had received an award for his teaching. When he told colleagues on the numeracy training day that his first numeracy lesson in the Pilot was the best lesson he had ever taught, it had a profound impact on staff.

134 Harris, A., Jamieson, I. and Russ, J. (1996) What makes an effective department?, *Management in Education* 10, 7-9; Sammons, P., Thomas, S. and Mortimore, P. (1997) *op cit.*

135 Siskin, L. (1994) *op cit.*; Hargreaves, A. (1994) *Changing Teachers Changing Times: Teachers Work and Culture in the Post-modern Age* London: Cassell.

136 Busher, H. and Harris, A. (2000) *Leading Subject Areas: Improving Schools* London: Paul Chapman.

From our teacher survey, we looked at a cluster of items related to teachers' perceptions of the Pilot's impact on their individual and collective practice<sup>137</sup>. We looked at teacher survey results of the 20 schools with sufficient number of teachers completing the survey to generate what could be considered a 'school response' (see Annex D). Significantly more teachers in high impact (89%) than medium impact (74%) or low impact (63%) schools felt the support of their head of department was effective. Teachers in high impact schools were also more likely than those in medium or low impact schools to report effective support for the Pilot from other department colleagues (91%, 77% and 69% respectively, compared with an average of 80%). This suggests that the more effective heads of department may have created a culture of mutual support in their departments.

Less effective strand leadership appeared to be characterised by several of the following characteristics: a lack of interest in KS3 and/or the Pilot; disagreement with the philosophy that underpinned the particular strand; difficulties in coping with the management aspects of the role; lack of support for colleagues; focusing extensively on administration in department meetings; poor monitoring processes; poor interpersonal skills; and inability to deal with conflict, relationship difficulties and power struggles in the department. One LEA strategy manager commented: "The unsuccessful subject leaders are not good team builders. They are not good at managing change, by showing teachers how having these ideas or structures will make their lives easier, for example, by reducing discipline problems".

In schools with large English and mathematics departments, strand leadership of the Pilot was sometimes delegated to the second in charge of a department or to a person with KS3 co-ordination responsibility. This delegation worked well where the head of department and strand leader operated effectively in partnership. Opportunities were provided for the strand leader's professional development and their training of others, and KS3 appeared regularly on departmental meeting agendas. Teachers also discussed and reflected on approaches to teaching and learning and experimentation. Here, the head of department provided clear line management and strong support, and the junior member of staff was coached to success in this significant leadership role.

Sometimes, however, such arrangements worked badly, even where the strand leadership was delegated to an effective, knowledgeable, and enthusiastic teacher. This happened where the head of department abdicated line management responsibility and the junior member of staff was unable to work in tandem with their head of department. This was sometimes accompanied by a lack of dialogue across the department, particularly among more experienced members of staff, so the strand leader worked in isolation. In some schools such circumstances contributed to the strand leader leaving the school at the end of the Pilot year, and progress with implementation of the Strategy was set back.

In smaller schools, the LAC role was sometimes taken on by the head of department, in addition to English strand leadership, and sometimes by the school strategy manager. This was one extra burden for the school strategy manager who, if their subject was not English, found themselves 'out of their depth' at LEA LAC co-ordinator network meetings. Interestingly, more of the implementation survey respondents in large schools (1200 or more pupils – 69%) than those in small or medium schools (42%) felt that co-ordination of the different strands by strand leaders was effective. One of the challenges for a number of strand leaders in small schools was that either they had other responsibilities or department colleagues had other responsibilities or were only working part-time in the department. This created extra difficulties in ensuring that all colleagues were present for department meetings and ensuring consistent messages and approaches in the classroom.

137 These clusters were identified through factor analysis.

### 6.3.4 Growing New Patterns of Leadership

It has become increasingly apparent that leadership is not just the domain of one person and that patterns of leadership distributed throughout the organisation are likely to lead to greater involvement and commitment of teachers<sup>138</sup>. Traditionally, secondary schools have focused on examination results at age 16 and 18. Teachers with experience, status and higher qualifications have aspired to teach these pupils. KS3 has been the poor relation. Responsibility for leading, managing and co-ordinating this phase has been undertaken by those with less experience and status. The Pilot and Strategy appear to be changing this. A number of the schools we visited seemed to be changing 'from the bottom up,' affecting the status of those responsible for leading KS3. These teachers were receiving generally high quality national training and consultancy support. In turn, they were training, and beginning to support and monitor, departmental colleagues, including those with more experience. They planned and presented whole-school training, and engaged in professional dialogue with colleagues in other subjects, other schools and, in the case of a few, other parts of the country.

In addition to this group, in some schools, the departure of heads of department in Pilot strand subjects led to deliberate hiring or promotion of 'young blood; keen and energetic teachers with only a few years' experience. Our visits suggested that many were rising well to this challenge, particularly when mentored and supported by senior leaders: "Maybe KS3 was significant. Teachers can take initiatives and revert to the old norm of a cosy past. We had to have people to embrace change: young ambitious people" (headteacher). Inevitably, we also encountered examples where this expansion of the leadership base unsettled colleagues in some departments, and where these new leaders' lack of experience caused problems for department colleagues and senior leadership teams.

Newly qualified teachers (NQTs) are, by definition, those given opportunities to learn from experienced colleagues as they are inducted into the profession. They are welcomed and admired (or pitied!) for their enthusiasm and sometimes for new ideas. In the past, in some schools at least it would have been unusual for NQTs to be valued by experienced teachers for their classroom skills and knowledge. The Pilot

appeared to be shifting the balance in craft skills. Newly qualified and other inexperienced teachers were often leading, training and supporting their experienced colleagues:

NQTs are much more skilled than the older, experienced teachers. ... Senior staff are terrified by the changes in planning; it's so fundamentally different ... The three-part lesson, and so on, is the way they [NQTs] teach naturally. I go to the NQTs in English and ask them about their planning and teaching. They say they can't tell me anything: I have huge experience. I emphasise that I need to learn from them (school strategy manager).

In our case it has been teaching an old dog new tricks. It is good having two NQTs in the department. TLF has given the NQTs more confidence to say to the head of department: 'We've just read this in *Geography Matters* or we've just seen this in *Thinking Skills*. Why don't we try such-and-such?' So it has given us licence to try new things ... It's not just me saying: 'Can we do this?' ... I am willing to learn from them. I've been here too long really; it would be silly of me not to (head of geography).

The Pilot also appeared to give some leaders of single-person departments (e.g. music) the chance to shine and influence colleagues, particularly in cases where they successfully took on the role of TLF team leader. In addition, some schools, in creating teaching and learning groups, or choosing teachers to be members of their Pilot Strategy management groups, also provided teachers with opportunities for team leadership.

### 6.3.5 The Effect of Teacher Shortages

Teacher shortages created management difficulties for a significant number of schools. More than two thirds of implementation survey respondents (68%) noted that staff turnover had affected the effective implementation of at least one of the strands. Of these schools, turnover of English staff had affected one half, mathematics staff turnover had affected just under half (47%) and that of science staff had already affected a fifth by less than a term into the Pilot. The movement of strand leaders and strategy managers was also considerable and inhibited continuity of strands or the Pilot as a whole, as can be seen in Table 6.3, which highlights movement during the Pilot in case study schools. Only two of the 12 schools faced no changes in those leading aspects of the Pilot, while two other experienced five changes. Three schools also had a change of headteacher during this time.

138 Gronn, P. (1999) Systems of Distributed Leadership in Organisations Paper presented to the Annual Meeting of the American Educational Research Association, Montreal.

**Table 6.3**

Changes of staff with Pilot leadership responsibilities during the Pilot in the 12 case study schools from September 2000 – July 2002.

Change of KS3 school strategy manager during Pilot	Changes of strand leaders during Pilot						
	ENGLISH	MATHS	SCIENCE	TLF 1	TLF 2	ICT	
No	No	No	No	No	No	—	
No	No	Yes	No	Yes**	No	—	
No	No	No	No	No	No	—	
Yes	No	Yes	No	No	No	No	
Yes	Yes	No	No	No	Yes	No	
Yes	Yes	Yes	Yes**	No	No	—	
No	Yes**	Yes**	No	No	No	—	
Yes	Yes**	Yes**	No	No	No	—	
No	No	Yes**	No	No	No	—	
No	Yes	No	No	No	No	—	
No	Yes	No	No	No	No	—	
Yes	No	No	Yes	Yes	No	—	
Total changes	5	8	9	3	3	1	0

[22 leadership roles changed once = 35%]

[7 leadership roles changed twice = 11%]

Given the importance of school strategy and strand leadership to individual and collective capacity, such changes make it very hard to embed new practices.

Some LEAs also faced recruitment issues, with the resulting effect that they were without a consultant for a particular strand for periods of up to one year. This put an extra burden on other staff – for example line managers – and reduced the amount of time and support available to schools.

### 6.3.6 LEAs' Leadership, Management and Mediating Role

Research literature highlights many examples of LEAs and school districts that have made an important difference to school improvement<sup>139</sup>, although establishing a causal link between the work of an LEA and pupil outcomes is difficult, as LEAs are only one possible influence on standards achieved<sup>140</sup>. A key feature of this Pilot has been the role of LEAs as the link between the policymakers, national and regional directors and schools. The initial Guidance for Pilot Local Education Authorities on Producing an Outline Plan (2000) indicated that the LEA's responsibility was to "manage the pilot locally", co-ordinate and "deliver the project", conduct training, and administer, monitor and report on the Pilot. They were expected to assign a KS3 strategy manager and line managers for each subject, and to employ a consultant for each strand. In our case study LEAs, some consultants had no line manager. LEA officers acting as line managers all had other roles. Many were subject advisers who managed particular strands. Some had no expertise in the subject area, but sought to provide strategic management support. There was no precedent for line management of TLF, so this was a pioneering role. The KS3 strategy manager was often the line manager for some or most of the consultants.

LEAs were given a significant school improvement role to play in the Pilot, as the conduit through which the national training, materials and consultancy were delivered to schools and through which the Pilot was supported, managed and monitored. There were some distinct differences in the way they perceived and fulfilled this role. Some of these differences may be attributed to the different relationships between schools and LEAs. Two small LEAs worked with all, or almost all, of the schools in the LEA since the beginning of the Pilot, building strong working relationships with them. Other small LEAs were less effective. Some LEAs maintained the discreet distance demanded by the local management of schools, exacerbated by the period of grant-maintained status for schools. An experienced adviser and line manager in a large LEA indicated that joined-up thinking in this LEA was difficult: "We have to rely on schools to do the joined-up thinking ... the LEA culture enables greater freedom for schools". Some LEAs used their youthfulness as unitary authorities or the consultation built in to the education development planning process to negotiate stronger relationships

139 Huberman, M. and Miles, M.B. (1984) op cit. Fullan, M. (1993) *Change Forces: Probing the Depths of Educational Reform*. London: Falmer Press; Stoll, L. and Fink, D. (1994) School effectiveness and school improvement: voices from the field, *School Effectiveness and School Improvement* 5 (2): 149-177; Ross, S. and Smith, L. (1996) op cit; Southworth, G. and Lincoln, P. (1999) *Supporting Improving Primary Schools: Using Evidence-based Management and Leadership*. London: Falmer Press.

140 Office for Standards in Education (2000), *The Annual Report of Her Majesty's Chief Inspector of Schools 1998/99*. The Stationery Office, London.

and new partnerships, including a clear leadership role. Government policy identifies the LEA role as 'challenge and support'. An LEA strategy manager commented: "The model of challenge, support and vision comes to mind and seems to, for me, encapsulate what [this] LEA is all about". Another LEA negotiated and enshrined its responsibility for 'leadership, challenge and support' in its EDP. The senior officer responsible for school improvement indicated that: "We provide leadership, not management of Government strategies".

In the plethora of educational initiatives, of which KS3 is only one, some LEAs appeared to have had the vision and confidence to act as guides and mentors to schools. When asked for general information about their LEA, if the senior leaders (director and team) communicate a clear vision of where the LEA is going, over three quarters (78%) of respondents to the LEA survey agreed. Further analysis, however, indicated that respondents were unanimously positive in eight of the 16 responding LEAs, while a majority of uncertainty or strong disagreement was voiced in two LEAs. Not only did respondents consider that the LEA vision was communicated to them, but almost all (93%) thought they were given the opportunity to influence the education development planning process. Some LEAs played a key role in encouraging and enabling schools to view separate national initiatives as part of a single purpose, which is at the heart of schools' priorities: the improvement of teaching and learning to improve pupils' progress and raise standards.

Pilot schools' responses to their LEA's role in the Pilot were generally favourable, with the majority (88%) of school strategy managers rating communication with your LEAs effective, and more than three quarters (76%) viewing the LEAs responsiveness to concerns as effective. The relationship between schools and LEAs can be problematic, however, in weak LEAs. For example, one illustration of this was during a visit to a non-pilot school in special measures, in an LEA also requiring special measures, where the school had received three sets of conflicting advice on KS3 leadership, management and curriculum from those involved in the LEA and its strategic partnership.

Our visits indicated that LEA strategy managers can play a crucial role in the KS3 Strategy. The perceptions, aspirations, implementation and effectiveness of strategy managers' leadership and management roles varied in different LEAs. These variations seemed to depend on: the status and other roles held by the officer appointed; the relationship between the LEA and schools; the structures of the LEA and the extent to which they enabled ease of communication and co-ordination across various branches of the support services; the time available; the amount and quality of strand management, and the line management of consultants, available through others.

All LEA strategy managers we met were enthusiastic and committed. They were emphatic that the Government's political and financial commitment, the high quality materials, effective training and high quality consultancy support provided for the Pilot were pivotal to its success. These external support factors enabled strategy managers to challenge some schools to become more actively and positively committed than would otherwise have been possible, although sometimes, particularly in the early stages of the Pilot, they had to explain to schools that expected materials or training had been delayed. The effectiveness of their management role appeared to be helped or hindered within the LEA by existing structures or conflicts. Several LEAs had consultants located in one building and connected to one division, and subject advisers, the consultants' line managers, in a separate building and division. These structural divisions created barriers to communication and coherent support for schools, confirmed in interviews in schools. Negotiations between LEA strategy managers and headteachers' consultative groups varied, often according to relationships between senior LEA officers and schools.

In some LEAs there was a lack of subject personnel to line manage consultants, so the strategy manager fulfilled this role. However, the time available was an issue. One KS3 strategy manager allocated 20 per cent of his time to this role. Another spent 50 per cent of her time on the Pilot, but recognised that the LEA was financially subsidising this commitment. The pace of implementation of the Pilot and Strategy created time pressures for the strategy managers. They also picked up the negative reactions and time pressures from schools, which required diplomacy, tact and the ability to devise alternative strategies. Most of those interviewed in schools and LEAs were very appreciative of the ways that LEA strategy managers fulfilled their responsibilities.

### 6.3.7 Summary

Leadership and management were important in facilitating or constraining implementation of the Pilot. Where senior leadership teams supported the Pilot, implementation often proceeded more smoothly. Strategy management at the school level became increasingly complex as the Pilot grew and where there was turnover of key staff. Successful implementation of individual strands depended, in large part, on the quality of subject and other strand leadership. LEAs also had a key leadership role.

## 6.4 Making Connections

Implementation of the KS3 Strategy is an even more ambitious undertaking than that of the National Literacy and National Numeracy Strategies – described by their Canadian evaluators as “among the most ambitious large-scale educational reform initiatives in the world”<sup>141</sup>. This is because of the Strategy’s focus (adolescence), range (five strands), and phase of schooling (mainly secondary). It is also only one of many initiatives for secondary schools and LEAs, who need to be able to manage complex change and deal with many innovations simultaneously. These are among the great challenges of change<sup>142</sup>.

All meaningful change involves learning, and learning involves making connections. Successful (expert) learners notice meaningful patterns of information not noticed by novices, connecting and organising their knowledge<sup>143</sup>. Similarly, schools that are learning organisations engage in ‘joined up thinking’, looking at the whole picture and seeing the relationships between parts<sup>144</sup>.

Pilot schools and LEAs were making connections in a number of ways. Some were more successful than others, who appeared to find it difficult to link different elements of the Pilot and connect it to their priorities and other initiatives.

### Key findings in making connections

- Schools and LEAs worked hard to promote progression. Some devised creative strategies for KS2-KS3 links, and there was early evidence that Pilot approaches were influencing KS4 work in some schools.
- Many schools struggled initially in trying to connect the ‘big picture’ for whole-school improvement. Some appeared to do this more successfully than others. Some LEAs played a key role in supporting this.
- Implementation appeared more successful when schools were clear about their own priorities and found ways to connect the Pilot with them.
- School and LEAs used a variety of mechanisms to link KS3 to other initiatives. The more successful ones took a co-ordinated strategic approach.

### 6.4.1 Connecting Key Stages and Progressing Through KS3

Teaching middle years pupils can create particular challenges for schools because adolescence is a period of significant physical, intellectual, social and emotional change. One teacher described this phase to us as “the moody blues”: during this time pupils transfer from one school to another, having to adjust to its different demands and transitions, and must start making subject choices that can have an important impact on their future. Here we look at progression: from KS2 to KS3, throughout KS3 and from KS3 to KS4.

#### Strengthening connections between KS2 and KS3

Enhancing progression between KS2 and KS3 has been a particular aim of the Pilot and Strategy. A summary of research on the impact of primary to secondary school transfer on pupils’ progress and attainment concluded that after secondary transfer, a significant number of pupils in Year 7 suffered from anxieties of adjusting to a new routine. They also faced repetition of work already covered and low expectations, a longer summer break prior to transfer before previous knowledge and skills had time to be embedded, and organisational structures promoted negative self-esteem for some of them<sup>145</sup>.

Schools chose to use some non-earmarked money to support transition activities. In the Briefing to Pilot Schools (2000), schools were informed of expectations that they should find ways to expose Year 6 pupils to KS3 teaching either in their primary classrooms or in secondary schools. They also needed to ensure Year 7 teachers observed Year 5 and Year 6 teaching, to arrange for either a literacy or numeracy summer school, and to continue tracking after entry to Year 7 pupils who attended summer school.

Schools embarked on this task in a range of ways. All had induction arrangements, but some schools appear to have created more effective links with their feeder primary schools than others did. Where this was the case we heard how primary and secondary teachers were much more aware of each other’s work. A large feeder primary had a group of volunteer teachers willing to have their mathematics lessons regularly observed by secondary colleagues visiting the school. In another school, visits to primary feeder schools had been extended beyond Pilot strand departments to geography, music and design and technology teachers.

141 Earl, L., Fullan, M., Leithwood, K., Watson, N. with Jantzi, D., Levin, B. and Torrance, N. (2001) op cit. p.1.

142 Fullan (2001) op cit.

143 Bransford, J. D., Brown, A.L. and Cocking, R.R. (1999) How People Learn: Brain, Mind, Experience, and School. Washington, DC: National Academy Press.

144 Senge, P. (2000) Schools That Learn. New York: Doubleday.

145 Galton, M., Gray, J. and Rudduck, J. (1999) The Impact of School Transitions and Transfers on Pupil Progress and Attainment. Research Report RR131. Nottingham: DfEE Publications.

Elsewhere primary and secondary science teachers were designing a Year 5 to Year 8 curriculum, and observations of primary science classes had led to Year 6 pupils being invited in to do practical science sessions. One LEA was promoting joint work between primary and secondary consultants to produce training, and was running cross-phase day conferences for different subjects.

Other schools appeared to be at an earlier stage of establishing links and dialogue between KS2 and KS3, with few teachers visiting primary classes and less understanding of the primary curriculum. Often, this appeared to be a result of difficulties in obtaining supply cover but in other schools, with similar supply cover difficulties, transition and liaison were priorities.

Moderating pupils' work. The LEA Strategy Manager brought together English teachers from Year 6 and Year 7 to moderate pupils' work. They graded examples of work, discussed and moderated each other's findings. Feedback indicated that this led to a greater understanding of teachers' strengths in both phases, and increased confidence by secondary teachers in primary teachers' assessment and marking.

Schools with large numbers of feeder schools found it more challenging to create and sustain links. Another difficulty faced by some schools attempting to develop more collaborative working partnerships with their local primary schools was an unresolved tension between primary and secondary teachers described by one headteacher as "a traditional mistrust between primary and secondary teachers. The primary teachers felt the pupils were doing well when they left and the secondary teachers were not prepared to recognise this." A separate transition project, supported by one school's Education Action Zone involved the literacy co-ordinators from the five involved schools (the pilot school and four feeder primaries) and two other English teachers being timetabled to work together regularly for a year. This worked very well, but the same model was not as successful with mathematics.

There were mixed responses to the improvement of links between these key stages, both in the implementation survey and from the interviews. Just over half of the school strategy managers (54%) thought links through Pilot work were effective. A similar percentage of teacher survey respondents felt that Pilot-related observations in primary schools were effective, while half (49%) thought that data gathered from primary schools was useful<sup>146</sup>. While LEA

survey respondents were more positive about how successful their LEA had been in creating primary/secondary links (66% rated this positively), and a few had developed very positive reputations for their work in this area, we heard stories about difficulties in data exchange, several schools noting late transfer. This had a resulting impact on target setting.

Some schools and LEAs were using a range of software systems to facilitate electronic transfer of KS2 data from primary to secondary schools<sup>147</sup>. Several mathematics and science heads of department and teachers with responsibility for liaison also described how data was being used more than before to plot progress. Some LEAs had also developed their own bridging units and teachers were occasionally invited to become involved in writing good practice guides on transition for the whole LEA.

### Enhancing progression throughout KS3

Better progression between Years 7 and 9 has also been an aim of the Pilot and Strategy. This period offers its own challenges with some pupils believing that certain years are less important because there are no examinations or tests, and others not feeling sufficiently engaged by new challenges or falling behind and finding it hard to catch up<sup>148</sup>. Many pilot schools focused initial efforts on Year 7, although a number noted that the reality of KS3 testing for Year 9 pupils meant that there was some focus on these pupils, particularly booster units before the testing period. As we were visiting Pilot schools in the first year of the national roll-out, most English and mathematics departments were also focusing on Year 8, with exception of those for whom staffing shortages or strand leadership difficulties had delayed a proper start to the Pilot. A number of schools were concerned about what they saw as a lack of central direction about taking "a progression perspective", focusing on Year 7, then Year 8, then Year 9, with school strategy manager speaking for several others in describing Year 9 boosters as "a sticking plaster approach". Inevitably, once teachers started trying out new teaching approaches with Year 7 classes, the more confident ones in particular also applied these ideas to their Year 8 and Year 9 classes. Fifty-nine per cent of the teachers responding to a survey item about frameworks found them valuable documents for supporting planning of progression, although this varied between subjects. While almost three-quarters of the mathematics teachers (72%) thought the frameworks were effective, the same was true of only a half of the science (50%) and English (52%) teachers.

146 It should be noted that more than a number reported being uncertain about these primary links and a considerable number of teachers did not answer the question, suggesting a lack of experience with such liaison activities.

147 We are aware that a Common Transfer File has been introduced, separately from the Strategy, with the intention to facilitate data transfer between KS2 and KS3.

148 Rudduck, J., Chaplain, R. and Wallace, G. (1996) op cit.

## Connecting KS3 to KS4

While the link between KS3 and KS4 was not highlighted in policy documents as a feature or intention of the Pilot, a few schools – and teachers within other schools – told us how Pilot ideas had rippled in to their KS4 teaching. As two commented: “The 10-minute starters are beginning to filter through to my teaching with Year 10” (English teacher); “I have tried some KS3 things in KS4 and they have worked well. Why not try them?” (Head of art/TFL strand leader). Two schools had developed a ‘good lesson’ for the entire school, drawing on the structured lesson from KS3, as well as other sources. In one of these, the idea had pre-dated the Pilot, but the Pilot was used to refine the ideas. An out-of-hours programme developed by one school had also generated interest in transition between KS3 and KS4, and the teacher with responsibility for this was planning a programme for all of the core subject departments.

### 6.4.2 Connecting ‘The Big Picture’

A number of large-scale studies indicate that whole-school reform efforts tend to produce better impacts than those targeted at specific aspects<sup>149</sup>. Unlike the National Literacy and National Numeracy Strategies, described as two different strategies, the KS3 initiative has been presented as one Strategy, with five strands<sup>150</sup>.

Our visits indicated that trying to grasp ‘the big picture’ was a challenge for many schools, particularly given the phased introduction. While policy makers and national team members accepted the logic of beginning with the English and mathematics strands, building on the National Literacy and National Numeracy Strategies, and following these with other strands, this was not the view of all schools and LEAs. Slightly more than half of the school strategy managers (58%), and LEA strategy managers, line managers and consultants (54%), agreed with the order of introducing strands. Early and case study visits confirmed this. Some schools, during our earlier visits, saw it as a number of unrelated initiatives and were trying to grapple with the overall and changing picture. School strategy managers and headteachers talked of “trying to make sense of this”, with one describing the Pilot as a ‘three-horse race’ between the core subjects, with the horses going separately down the race track. In response to our November 2001 implementation survey, half of the school strategy managers (51%) were positive about the interrelatedness of the strands. People in some case study schools felt that the strands had been added in a linear fashion, one after the other, one headteacher describing this as “unjoined up

thinking”, and an LEA strategy manager and headteacher describing it as “piecemeal”. Two schools also told us they had not known that the Pilot was more than English and mathematics when they agreed to join.

A number of those interviewed commented on a lack of clarity in the early days about the TLF and ICT strands. The history of TLF included evolving conceptions of what would be incorporated within this strand and this created some confusion, particularly for LEA consultants. The Pilot guidance for the ICT strand was also described as ‘unclear’ by the strategy manager in one of the five ICT pilot LEAs, and the ICT consultant in another LEA commented on an early lack of leadership. There were fewer national team resources available to support the ICT strand initially, and this may have contributed to some of the issues raised here.

The ICT strand has focused initially on the teaching of ICT as a discrete subject because of weakness identified by Ofsted. This strand, however, raised a particular issue for some schools and LEAs who felt that ICT should be taught across the curriculum and were, therefore, concerned about a lack of overt demonstration of ICT in the other strands: “This detracts from the view that it is cross-curricular” (ICT line manager). The Australian consultant shared this concern. On the basis of his experience of ICT reforms elsewhere, he commented on the limited focus on integrating ICT across the curriculum:

... with a consequent lack of focus on the potential of ICT to leverage learning in core curriculum areas. In many ways, the ICT the initiative . . . was representative of the ‘info tech’ approach that was evident in Australian schools a decade ago. Secondary schools face a major challenge in providing access to ICT in their classroom learning environments. Until ICT can become a taken-for-granted component of standard classroom environments, teachers will not develop the understandings and capacities that are necessary to integrate ICT across the curriculum<sup>151</sup>.

Some schools articulated a proactive stance towards what they saw as disconnected strands, illustrated in one school strategy manager’s comment: “We have to get this all together. They [the national team] are seeing it separately.”

Over time, most schools realized that a way to make sense of and manage the different ‘pieces’ of the Pilot was to connect them across the school. There was a growing perception of the need, at both school and LEA levels, to approach the Strategy as a whole strategy from a whole-school perspective: “We started with the components, which was negative, then got holistic, which was quite exciting” (school strategy

149 Stringfield, S. (2002) Issues in conducting and studying large-scale educational reform, *Journal of Educational Change* 3 (1):63-73.

150 Only five LEAs piloted all the five strands initially, including the ICT strand. The ICT Pilot extended to all pilot LEAs in summer term 2002.

151 For a review, see Cuttance, P. (2001) Information and Communication Technologies in School Innovation: Pathway to the Knowledge Society, Commonwealth of Australia: Department of Education, Training and Youth Affairs.

manager). We mainly heard of connections from those in senior leadership roles, including a headteacher of a non-pilot school recently started on the national rollout. Most (85%) senior leaders and strategy managers (88%) responding to the teacher survey felt that my school has adopted a whole-school approach to implementing the KS3 Pilot. Conversely, this was only seen to be the case by just over half (53%) of the total teacher sample, suggesting that many of those involved in individual strands still were not seeing 'the big picture'. The emphasis on attempting to bring the whole school together was much stronger where the headteacher and senior leadership team actively supported it.

## Making connections through teaching and learning

Schools made connections in different ways, but a common feature was an overt cross-school focus on teaching and learning. The TLF strand appeared to be the key connector for a number of the schools we visited because it focused on cross-curricular pedagogical issues that had no particular association with any one department, unlike LAC and NAC. LEA strategy managers were also very positive about the potential of the Strategy as a means of improving KS3, particularly the focus on teaching and learning, as exemplified in the TLF strand.

### Connecting the big picture – examples from case study schools

- Establishing a whole school teaching and learning group (in one school, a third of the staff were members)
- Creating a KS3 management team whose members had cross-curricular responsibilities (e.g. LAC, coaching, TLF, primary/secondary liaison)
- Assigning the KS3 management role to an assistant headteacher whose main responsibility was teaching and learning
- Developing a 'good lesson' for the whole school, drawing on the three-part lesson
- Highlighting the importance of whole-school LAC and TLF professional development sessions and, in some schools NAC sessions

Several LEAs saw it as their role to help schools make connections across the strands by emphasising that the Strategy was a teaching and learning strategy. As one LEA

strategy manager commented: "because of the roll-out calendar and because everyone calls it a literacy and numeracy strategy, I have had to remind them that it's a teaching and learning strategy. I think this is the message in the Pilot schools. I'm pretty sure it's not the message in the other schools yet." Another commented: "I think making connections is a crucial part of making the Strategy a success".

An LEA residential conference for senior leadership teams. The initial step taken to bring all the senior leadership teams together for a residential conference was crucial in the development of the KS3 Pilot and Strategy in this LEA. In teams they worked on a case study school which had all the common school problems in the LEA. They were given information on recent Government strategies and indicative resources and asked to use these to find solutions to the problems. They were assured that this was not about rewriting their agenda: rather, the strategies would reinforce what they were doing to improve the school and would assist with focus and resources, whatever level they had reached. As the LEA strategy manager told them: "The starting point is your raising achievement agenda".

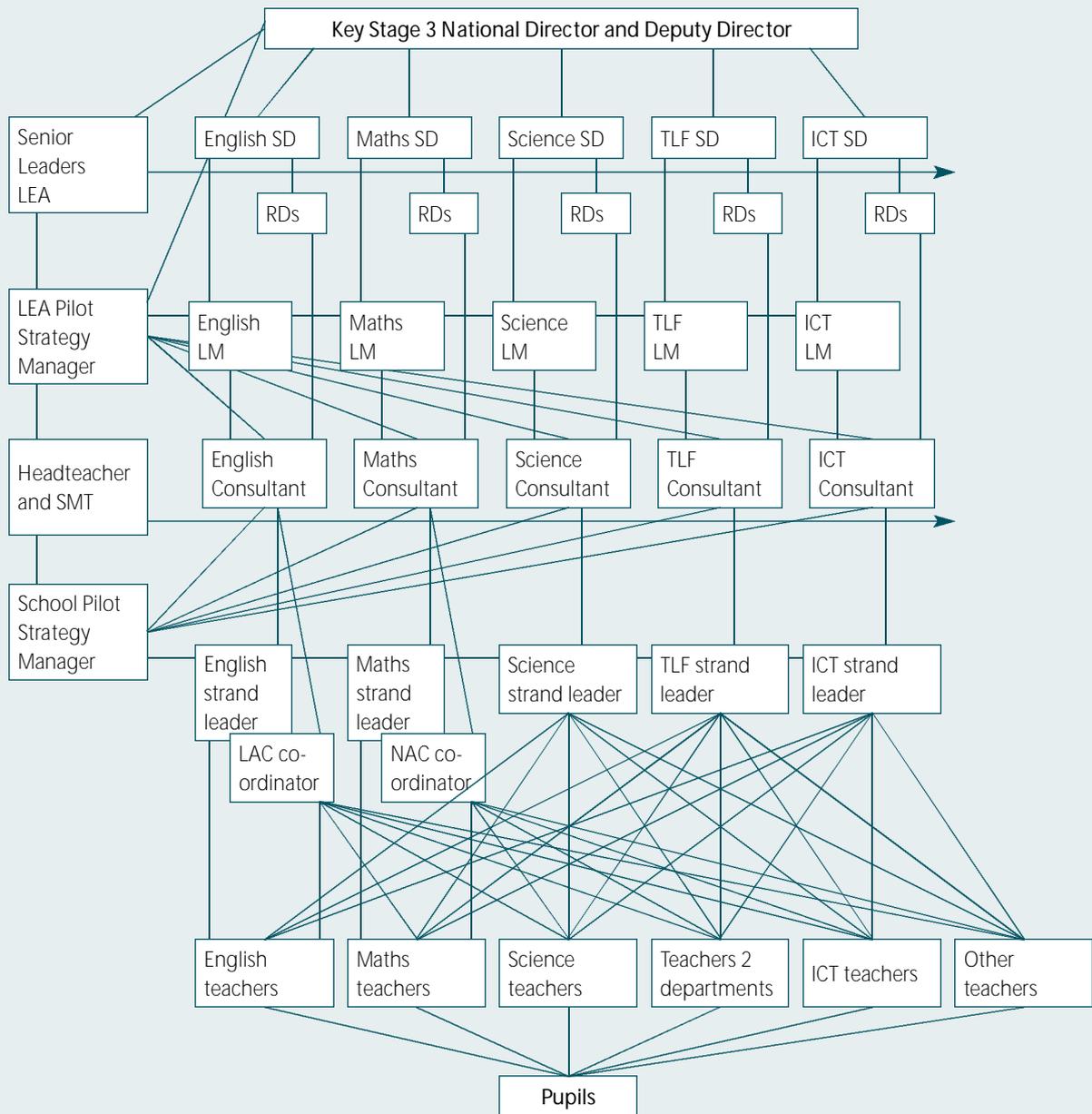
Some LEAs appeared to be struggling more than others to make their own connections across the strands. Consultants in one case study LEA had very little knowledge about what was going on in other strands. In two other case study LEAs, however, various members of the KS3 LEA team noted that working on the Pilot had encouraged them to work more closely together and become more aware of others' work. During some observations of LEA training days, we met consultants working on other strands. For example at a science monitoring management training day, led by the LEA science consultant, the TLF consultant participated. At one point the science consultant highlighted connections between science and TLF.

The people who ultimately have to make connections are the pupils, as Diagram 6.4 indicates. The need for connectedness across the school is seen here most clearly in that all five strands affect every pupil<sup>152</sup>. The concept of 'school connectedness' has been shown to contribute significantly to variations in measures of adolescent emotional distress<sup>153</sup>. With a complex set of connections and relationships from the national professional team down to the pupils, the potential for messages to get lost or distorted is considerable, which makes clarity of communication critical.

<sup>152</sup> In those schools not participating in the ICT Pilot, all four remaining strands affected each pupil in KS3.

<sup>153</sup> Resnick, M. D. et al (1997) Protecting adolescents from harm: findings from the National Longitudinal Study on Adolescent Health, *Journal of the American Medical Association*, 278:823-832.

**Diagram 6.4**  
Making connections



**Key:**  
SD= Standard Director  
RDs = Regionals Directors  
LM = Line Managers  
LAC = Literacy Across the Curriculum  
NAC = Numeracy Across the Curriculum

## Literacy Across the Curriculum (LAC) and Numeracy Across the Curriculum (NAC)

LAC and NAC were two features of the pilot intended to impact all subjects, along with the whole-school TLF strand day in the spring term 2002. LAC was better received by teachers than NAC because of a perceived relevance to other subjects. One head of mathematics in a school in a challenging area, who also had responsibility for mentoring new teachers, told us: "We haven't done much numeracy across the curriculum. Our feeling is that literacy across the curriculum needs the thrust first. I've seen some pretty good literacy across the curriculum in my role with new teachers. Literacy is a much bigger issue because some pupils can't get access to the curriculum." We came across several other schools where NAC had barely got off the ground, although a few schools had developed strategies such as assigning a member of the mathematics department to each of the other departments to support them in incorporating numeracy into their teaching.

Generally, schools were giving much more attention to LAC. For some schools and LEAs "the timing was right", and the general consensus appeared to be that the training was very successful, encouraging further work, and that the modules were "good and focused". Where the school's strategy manager had a literacy background, the school appeared to have a head start. One English line manager observed, however, that when the LAC co-ordinator role was carried out by a senior leader with insufficient time to drive initiatives forward, despite interest and skill, this held up LAC's progress. Relationships between departments also appeared to affect the success with which LAC spread throughout the school. Teachers in a couple of schools noted how the English department had to introduce LAC carefully to ensure that there was not a negative reaction from other colleagues if they felt that they were doing the English department's work.

### 6.4.3 Connecting the Pilot with School Priorities

While just over two thirds (68%) of school strategy managers rated the Pilot positively on its coherence with their other school initiatives, the majority felt that their school had successfully managed to achieve compatibility with school priorities (88%) and coherence with other school initiatives (81%). This suggests that, for some at least, there had been work to do to mesh the two together. School strategy managers who viewed the connection between the Pilot and their other school initiatives more favourably, also had more positive feelings about the relationship between the different Pilot strands. This may be because they had a clearer 'big picture' than strategy managers in other schools did. Our school visits and survey responses indicate that schools had different needs.

For some, literacy was seen as the imperative. In several schools, there had been a whole school thrust on literacy when the Pilot arrived. One case study school, for example, had been focusing on literacy at secondary transfer and teachers had been visiting local primary literacy lessons in the year before the Pilot started. As the English strand leader told us: "The Pilot was more than an add-on. It gave it [the school's literacy interest] a focus". For other schools, working as a whole staff and promoting whole-school approaches to teaching and learning was seen as a means of raising achievement. We visited a number of schools who had been focusing for the last two or three years on a range of approaches to teaching and learning across the curriculum. In other schools, raising standards in the three core subjects was their main interest.

### 6.4.4 Widening Connections: Going Beyond the School and Links with Other Initiatives

The Australian MYRAD design<sup>154</sup> contains an element on home, school and community links. This was not a specific feature of the KS3 Pilot, although we found an informative KS3 link for parents on one pilot LEA's website. Reporting to parents was an area in need of improvement noted by a number of teachers, who reported that many parents were confused by the assessment system and by the information that they were receiving about their child's progress at school. We heard a few stories of the challenges of involving parents in secondary schools but, generally, we saw little indication of schools actively involving parents in the Pilot Strategy, with the exception of induction activities related to KS2–KS3 transition.

Evidence from international attempts at large-scale reform suggests that it is important to look at how different parts of the reform fit together.

... working with systems means conceptualising strategies with whole systems in mind. Working with schools means taking into account the total set of changes facing given schools, and figuring out the best relationship with the surrounding infrastructure ... Large-scale reform then, will require units to make connections<sup>155</sup>.

One of the questions we explored was how schools and LEAs were making links between the Pilot and other initiatives. For a number of schools, the big picture extended more broadly, as they actively sought to fit each new initiative to existing ones. One headteacher spoke of how she "deliberately fused" the Pilot with other initiatives: "If it is seen simply as another initiative it will also be regarded as having a relatively short shelf-life. My task is to incorporate it into whole school policies which will be continually developing. I will subvert any initiatives and draw them into the whole school work on teaching and learning" (headteacher).

154 Hill P.W. and Russell V.J.(1999) op cit.  
155 Fullan,M.(2000) op cit.

Several LEAs had also come up with strategies for connecting their initiatives and ensuring that they fit with their EDP. For example, one had created a set of grids setting out the detail of each of its EDP initiatives, including KS3, against each of the central strands of its improvement strategy. The officer responsible for school effectiveness in another LEA indicated that: "An important part of the LEAs role is to act as a buffer for schools, to see links between the initiatives . . . to receive, absorb and then make links." He thought that his LEA could do this, because it was "far-sighted, has been ahead of the game and is prepared to get involved."

One case study LEA was described as a "multi-initiative LEA": Here, LEA leaders had taken on so much that schools felt they had innovation overload. Attempts to rationalise or integrate these through an LEA committee were seen as only partially successful. This had an immediate and longer-term effect on the KS3 Pilot and Strategy. Initially, some headteachers in this LEA were resentful that they were involved in the Pilot. Involvement in a range of apparently unconnected initiatives also had the effect of dissipating schools' energy and threatening sustainability.

A paper explaining the links between the KS3 Strategy and the initiative for Schools Facing Challenging Circumstances (SFCC) was co-written by members of the two national teams and sent to the relevant schools and LEAs at the start of the national roll-out. It highlighted links with other programmes such as Excellence in Cities (EiC) and Education Action Zones (EAZ). From our surveys and case study visits, however, it appeared that making connections between the Pilot and other Government initiatives at least partly depended on whether they were seen as complementing each other. Under half (44%) of the school strategy managers responding to the implementation survey viewed the Pilot as coherent with other initiatives, although 60 per cent of LEA respondents rated the coherence positively. Part of the issue for some schools involved in EiC was the number of different elements, with different people going out for training: "and then they come back and do their bit. Then there's the Pilot and different people doing the same thing. I keep on reading the overall vision but if different people work in parcels it's difficult to manage" (school strategy manager). One of the strategy managers described particular struggles as they tried to organise their senior management team members' responsibilities to link up the various strategies: "You have to find your own connections. It's down to the school to make coherence."

Interestingly, considerably more LEA respondents (85%) saw coherence between the Pilot and other LEA initiatives. In visits to schools and LEAs we found differences between those that saw the links and were actively trying to develop them, and those for whom there were few connections, who

were struggling to see connections or who actually felt there were fundamental differences in the philosophy or content of the initiatives.

#### Examples of connections made between the Pilot and other initiatives

- Sending the EiC Gifted and Talented co-ordinator with the KS3 strategy manager and two heads of foundation departments to the two-day TLF training
- Clearly thought through rationales for attaching members of the senior management team to what were seen and articulated to staff as linked initiatives
- Primary and secondary teachers team teaching and doing cross-phase development work through their EAZs, and sharing Key Stages 2 and 3 frame works
- A KS3 literacy co-ordinator who was also the EAZ co-ordinator "because literacy fits everything"

We compared the implementation survey responses for the 44 schools also involved in EiC with the 86 other schools. Strategy managers in EiC schools were significantly less positive about the Pilot's coherence with other school initiatives (62% EiC schools positive, compared with 80% other schools positive). In addition, although generally positive, significantly fewer thought their school had been successful in strengthening KS3 teaching through the Pilot (86% EiC schools, compared with 99% other schools). This might be because they thought EiC activities were already helping them strengthen KS3 teaching.

While not significant statistically, there was an indication, from teacher survey respondents, that a greater percentage of teachers in EiC schools thought that the Pilot had led them to set more challenging targets for their pupils. We also compared the responses of teachers in EAZ schools with those in other schools<sup>156</sup>. We found a significantly higher percentage of these teachers agreed that:

- the Pilot had led them to set more challenging targets (76% EAZ teachers compared with 57% of others);
- the Pilot had led to more focused staff discussion about teaching and learning (88% EAZ teachers compared with 64% of others); and
- their school had adopted a whole-school approach to implementing the KS3 Pilot (60% EAZ teachers compared with 52% of others<sup>157</sup>).

In contrast, significantly fewer of the EAZ teachers (36%) than those in other schools (61%) thought that the training had prepared them well for teaching on the Pilot.

<sup>157</sup> Notably, 22% of non-EAZ teachers disagreed, compared with no EAZ teachers. The remainder were uncertain.

<sup>156</sup> It should be noted that we only had responses from 41 teachers in four EAZ schools, so results should be treated with caution.

## 6.4.5 Summary

Making connections at all levels appeared critical to the successful implementation of the KS3 Pilot. This section has illustrated how it was not always easy for schools and LEAs to make connections. We saw efforts to make better connections between the different key stages, though there is clearly scope for further development. Within KS3, the initial focus was mainly on Year 7. It will be important to monitor progression within KS3 over time. Those schools that had a clearer sense of their own priorities and took a whole-school approach appeared better able to pull the different strands together and connect them with other school and external initiatives.

## 6.5 Engaging Pupils and Assessing Their Learning

Engaging pupils in the early years of their secondary schooling is widely recognised as a critical issue in pupils' educational progression. Given understandings about the nature of adolescence, it is not surprising that pupils' own voice in their learning and school improvement has increasingly been seen as important<sup>158</sup>. Perceptions of their learning are valuable sources of data for schools planning their own improvements for middle years pupils<sup>159</sup>. As the ultimate recipients of materials and of innovations, pupils add a vital dimension that helps to clarify the overall picture. Current understanding of the learning process emphasises the importance of pupils being active partners in the learning process<sup>160</sup>.

This theme looks at what Year 8 pupils themselves thought about school, their motivation, how they learnt and how much the Pilot had begun to impact on pupil engagement and attainment. The Briefing for Pilot Schools (2000) provided a series of measures by which the KS3 Strategy's success would be measured. These fell broadly into categories of engagement and attainment. Engagement involved indicators such as improved attendance, reduced exclusions, improved pupil attitudes and motivation. Attainment involved continuous improvement, meeting targets and improved attainment by all pupils across English, mathematics and science at Year 9. Our evaluation addressed pupil attitudes, motivation and attainment in order to determine the Pilot's relevance to, and impact on, these.

### Key findings in engaging pupils and assessing their learning

- Year 8 pupils recognised the importance of school and were generally positive about their own commitment and learning.
- Year 8 pupils felt their learning was helped by clear objectives, enjoyable and active lessons, and group work.
- There were substantial gender differences in attitudes to school and learning
- Pupils' attitudes reflected differences in school context.
- The Pilot had not yet impacted on pupils' underlying attitudes to school and learning.
- Teachers in the Pilot were beginning to see positive pupil responses to the teaching and learning strategies.
- The 2001 progress tests suggested only limited improvement for pupils entering at level 3.
- The 2001 optional tests showed wide variability in improvement for Year 7 pupils at level 4 and above with positive outcomes in mathematics.

### 6.5.1 Pupil Engagement

Pupil engagement is one of the four key principles on which the Pilot and Strategy are based: "promoting approaches to teaching and learning to engage and motivate pupils and demand their active participation" (Pilot documentation). While our evaluation remit did not involve classroom observation, we have been able to gather information on the perceptions of both teachers and pupils about engagement, motivation and participation.

158 Levin, B. (2000) Putting students at the centre in education reform, *Journal of Educational Change* 1 (2):155-172; Thiessen, D. (1997) Knowing About, Acting on Behalf of, Working With Primary Pupils' Perspectives, in A. Pollard, D. Thiessen and A. Filer (eds) *Children and Their Curriculum*. London: Falmer Press; see also [www.consultingpupils.co.uk](http://www.consultingpupils.co.uk) for a summary of the ESRC-funded project on Consulting Students about Teaching and Learning.

159 Hill, P. and Russell, J. (1999) *op cit*. Muschamp, Y., Stoll, L. and Nausheen, M. (2002) *op cit*.

160 Fielding, M. (2001) Students as radical agents of change, *Journal of Educational Change* 2 (2):123-141.

## Pupils' attitudes to school and learning

Our evaluation included a survey<sup>161</sup> in May 2002 of Year 8 pupils in matched pilot and non-pilot schools to see if there were perceptible differences in the pupils' responses which indicated that the Strategy was beginning to change their attitudes and engagement. The rationale for using Year 8 pupils in the summer term of 2002 was that in pilot schools pupils would have been exposed to almost two years of the Strategy whereas in non-pilot schools, the Strategy had involved two terms of English and mathematics, focused mainly on Year 7.

The survey asked the pupils questions about their subject preferences, school life, learning, and teachers. Because of the inclusion of non-pilot schools, the questions could not deal with specific teaching and learning strategies of the Pilot. The striking feature of the pupils' responses (2151) was the similarity between pilot and non-pilot schools on the vast majority of items. These were mainly positive about school, teaching and learning, more so than other recent research. On attitudes to school these included pupils recognising the importance of school and the importance of doing well (97%) and that getting good results is important (96%). Two thirds (69%) rated their secondary school as better than their primary school, in contrast to recent surveys of Year 7 pupils<sup>162</sup>.

In terms of motivation and engagement, less than two thirds reported I'm really interested in my school work (61%), and only half thought learning is fun (49%), though 80 per cent reported I like learning. While 70 per cent reported I like work that challenges me, 18 per cent felt their work was too easy for them and 14 per cent thought it too hard. Most of the pupils (90%) thought their work was good, though the same percentage agreed they could improve their school work.

The responses were more mixed in relation to their teaching. While three quarters (78%) reported getting on well with their teachers, only half (49%) believed all or most of their teachers care what I think, while slightly more (58%) listen to what I say and praise me when I work hard (59%). In terms of teaching, three quarters (73%) believed their teachers help me understand my work and slightly less tell me how I can improve my work (70%). Only two thirds (63%) thought most teachers explain things clearly and encourage me to think for myself (67%). Only one third (35%) thought most teachers make learning fun.

When we looked at how some of these items cross-related, we found highly significant links<sup>163</sup> between teachers explaining things clearly and pupils being really interested in

school work and not giving up when work gets hard. Having to think hard and learning is fun were both linked to being really interested in school work. I like learning was strongly linked with I get on well with my teacher. It would be valuable to consider the implications of these links, particularly in relation to teaching and learning approaches in the KS3 Strategy.

## Pupils' learning preferences

The survey included an open-ended question on what helped them learn in school, for which we received a total of 4335 responses. Pupils expressed strong preferences for clear learning objectives and explanations, making learning active and enjoyable, and group work, as well as particular subjects.

### Clear learning objectives and explanations

One of the Year 8 pupils' most frequent responses (343) involved teachers 'explaining clearly'. Pupils found it helpful when teachers described the objectives and aims, so that they knew what the lesson was going to be about. Pupils found it valuable when what they had to do, the main points and explanations were written on the blackboard, and when the teachers repeated what they had to do or went over it more than once in different ways (48). They liked going through what they had done at the end of the lesson and they wanted feedback: specifically comments that told them where they went wrong and how to fix it (also 48).

#### Pupil survey: 'Please describe what helps you to learn in school'

##### Clear explanations

- When they explain things clearly and not too complicated because if them too complicated I get muddled up
- When tasks are explained clearly and in relation to what I think and when video's, diagrams or other clear techniques are used as I then concentrate more and take more in.
- My science teacher and English teacher writes out the aims for the lesson, which helps me understand what we are going to do in the lesson. I don't like teachers who just give you a piece of work and expect us to know what to do, they have to explain the piece of work.

161 See Annex A for a brief description of the survey.

162 See Ofsted E-publication (2002) Changing Schools: Evaluation of the Effectiveness of Transfer Arrangements at the age of 11. Version 21 June 2002.HMI 550. Report from the Office of Her Majesty's Chief Inspector of Schools.

163 Significance level was  $p < 0.001$ .

## Making learning active and enjoyable

'Fun' was the most frequently cited (359) means of helping learning. 'Fun' was rarely defined by the Year 8 pupils ("If the lesson is fun, I learn things") but often seemed to involve activity and teachers trying to make the lesson enjoyable. Pupils reported that they liked interesting (72) and practical lessons (118), which included projects (26), visual lessons (47), games, puzzles and quizzes (82) and not copying from the board or from books (34). Targets were also seen as helpful (69).

### Pupil survey: 'Please describe what helps you to learn in school'

#### *Making learning active and enjoyable*

- I think videos, pictures and diagrams help me to understand and learn things better. I think seeing something gives me a better idea of things.
- If we can have things to help us visualise certain things e.g. science – diagrams, English – some people acting out a play in front of us. It is more fun if we can get ourselves involved e.g. in science we do experiments ourselves or in geography we were trying to understand how we got seasons. This was easier to understand when we got into a circle and passed the sun around taking into consideration which way the axis was facing.
- I learn when the work is fun and interesting and sometimes when we can interact with others. I do not learn when we have to listen for ages and read off the board.
- I think that most of the teachers make learning fun, like hold quizzes and award prizes... I enjoy practical lessons where we get to do hands on activities but I think it depends on whether your teacher makes an effort to help you enjoy the lesson.
- I think making the lesson memorable and having a laugh in the lesson helps you learn and remember the lesson.
- For teachers not just to make us write because we never take any of it in but in a poster or a video or even an experiment we could actually take some time in using this example which would help to stick it in our brains. When we copy stuff it doesn't actually make us think.

## Group work

Another popular response on what helped pupils learn was working in groups (285). Over 90 per cent reported enjoying group work. The value of group work for the pupils was that: "you see other people's point of view", and you "have got someone to help you". Pupils learned by getting help from friends (136); "I would be able to work better if we could discuss it more and talk to our friends about it more to help me to understand it". Cooperative group work has been shown to have a positive effect on both pupil achievement and social development<sup>164</sup>.

## Subject preferences

Some of these learning preferences may play a part in pupils' attitudes to different subjects. The most enjoyable subjects were PE (31%), art & design (12%) and drama (12%), supporting the pupils' comments about activity and learning (without extensive writing). When asked what subjects pupils were best at, mathematics (15%) and English (13%) came into the frame behind PE (20%). Paradoxically only four per cent of pupils rated mathematics as the subject they enjoyed most and six per cent English. Of those who rated English as their best subject only 20 per cent rated it as their most enjoyed subject, while the corresponding figures were 16 per cent for mathematics and 30 per cent for science. However, two thirds of both pilot and non-pilot pupils (66%) found English very or quite interesting. The proportion for both was nearer half for mathematics (53%).

## 6.5.2 Pupil Differences in Attitude and Engagement

These very general findings across pilot and non-pilot schools conceal more significant differences in terms of gender, school attainment and socio-economic status. These suggest that some longstanding gender differences are still with us. They also raise concerns about engagement of those in more disadvantaged schools, but not without some surprisingly positive elements.

### Gender differences – still stereotypical?

One of the concerns at KS3 has been the increasing disengagement of some underachieving boys. The Strategy implicitly addressed this concern. Our survey, while indicating some less positive attitudes for boys around behaviour and enjoying school, has also alerted us to longstanding issues around girls' perceptions of themselves as learners.

164 Joyce, B., Calhoun, E. and Hopkins, D. (1997) *Models of Learning Tools for Teaching* Buckingham, Open University Press; Sharan, S. (1990) *Cooperative Learning Theory and Research* New York: Praeger; Johnson, D.W., Maruyama, G., Johnson, R., Nelson, D. and Skon, L. (1982) Effects of co-operative, competitive and individualistic goal structures on achievement: a meta-analysis, *Psychological Bulletin* 89:47-62.

Across the same 59 items there were 19 with statistically significant differences, 10 of these being highly significant<sup>165</sup> (see Table 6.5A). Boys were more positive about secondary school than girls, though girls enjoyed school significantly more than boys. The other significant differences formed a clear pattern in which boys were more willing than girls to attribute their performance to ability, intelligence, creativity and problem solving, even if girls actually performed better. Boys saw teachers as more helpful to them, while girls behaved better, and enjoyed mathematics significantly less. These patterns have shifted very little over time<sup>166</sup> and fit with attribution theories generated in the 1980s<sup>167</sup>.

**Table 6.5A**  
Boy/girl differences: findings with high statistical significance ( $p < 0.001$ )

	Boys (n=945)	Girls (n=963)
	%	%
Strongly agree/agree		
I enjoy school	66	76
This school is better than primary school	75	65
I behave well at school	78	91
I think I'm clever	65	56
I am good at problem-solving in my learning	75	64
I am good at thinking creatively in my lessons	83	77
I like work that challenges me	74	66
All of them/most		
My teachers help me understand how I learn best	57	49
My teachers think I behave well in class	67	76
Very/quite interesting		
How interesting do you find lessons in mathematics?	58	49

## Pupil attitudes and schools' achievements

Pupils were classified according to their school's KS3 results so that we could assess whether there were differences in attitudes between higher, middle and lower achieving schools. We also ran a similar analysis for percentage of free school meals (FSM), as a proxy for socio-economic status, which generated very similar results.

While pupils in lower achieving schools were significantly less positive about secondary school, they were more positive on a variety of teaching and learning items (see Table 6.5B). They were significantly more in agreement on 'liking learning' (84%) and 'I think about how I learn' (79%) than the middle and upper groups. They also had significantly higher percentages on 'my work is too easy for me', perhaps reflecting lower expectations. In pilot schools, however, this group was significantly different from non-pilot schools in reporting 'my work is too hard for me' (20% against 12%), possibly suggesting increased demand on pupils in pilot schools.

**Table 6.5B**  
Pupil attitudes classified by school achievement at KS3: findings with high statistical significance ( $p < 0.001$ )

	Upper quartile n = 440	Middle quartiles(2) n = 1088	Lower quartile n = 370
	%	%	%
Strongly agree/agree			
This school is better than primary school	79	71	58
My work is too easy for me	13	19	23
All of them/most			
My teachers tell me how I can improve my work	65	70	78
My teachers encourage me to think about learning	50	59	66
My teachers help me understand how I learn best	46	53	60
All of them/most			
How interesting do you find lessons in ICT?	63	73	79

165 Significance level was  $p < 0.001$

166 Gipps, C. and Murphy, P. (1994) *A Fair Test? Assessment Achievement and Equity*. Buckingham: Open University Press.

167 See, for example Wiener, B. (1985) An attributional theory of achievement motivation and emotion. *Psychological Review*, 92:548-573.

The group from lower achieving schools also saw teachers as more helpful on improving work, encouraging them to think about learning, and understanding how they learn best. The overall picture here was of the pupils in lower achieving schools being generally more positive about their learning experiences. They also saw targets as helpful (66% against 56% in upper group) and were more likely to agree that at the end of the lesson we review what we have learnt (44% against 34% in the upper group).

### Pupil engagement and school capacity

A key lens through which we have viewed this Pilot is how it plays itself out in schools that vary in their capacity to bring about and sustain change. Drawing on teachers' ratings of school capacity<sup>168</sup>, we compared the results of the 416 pupils in the 20 schools for which we had sufficient teacher responses to constitute a 'school view'. While the pupils in high, medium and low capacity schools did not significantly differ in their academic self-perception, several features of the learning experience were viewed significantly more positively by pupils in high, and sometimes medium, capacity schools than by their peers in low capacity schools. These included relationships with teachers and teachers' explanations and feedback. Pupils in high capacity schools were also more positive about their secondary school, found their work more interesting and were also more willing to persevere with challenging work (see Table 6.5C). These data appear to provide further confirmation of the importance of capacity to school improvement.

**Table 6.5C**  
Comparing pupil survey responses in high, medium and low capacity schools

	High capacity	Medium capacity	Low capacity
	N of pupils = 144	N of pupils = 139s	N of pupil = 133
	%	%	%
I get on well with my teachers	86	78	66
My teachers care what I think	62	51	49
My teachers listen to what I say	69	61	57
My teachers tell me how I can improve my work	74	76	59
My teachers help me to understand how I learn best	60	51	44
My teachers make learning fun	40	35	26
This school is better than primary school	80	70	70
I'm really interested in my school work	69	55	36
I give up when work gets too hard for me	17	26	35

### 6.5.3 The Impact of the Pilot on Pupil Engagement

Positive pupil attitudes, motivation and participation are key indicators of the success of the Pilot. Our evaluation suggests that the Year 8 pupils in the second year of the Pilot had positive views on which the Strategy can build. We did not detect major shifts in general attitudes towards schooling among the pilot schools' pupils, though research elsewhere<sup>169</sup> highlights that such shifts may come later in the change process, particularly as implementation is not yet complete. The survey also indicates there are issues in relation to adolescent learning and engagement that may need further attention.

#### Pilot and non-pilot differences

There were only five statistically significant differences in pilot and non-pilot pupil responses across the 59 survey items and these suggested no clear pattern (see Table 6.5D) and we would not therefore wish to read too much into them.

168 See section 6.1.2.

169 Sammons, P., Thomas, S. and Mortimore, P. (1997) op cit.

**Table 6.5D**  
Pilot and non-pilot pupils' responses  
with statistically significant differences (5/59 items)

	Pilot % (n=903)	Non-pilot % (n=1016)
I enjoy school	69	73
My teachers explain things clearly	67	61
My teachers tell me how I can improve my work	68	72
My teachers listen to what I say	62	55
Lessons in science are very/quite interesting +	71	76

\* n = number of responses; + This is a higher percentage than mathematics (54%) and English (66%)

This suggests that the Pilot has not yet impacted on underlying pupil attitudes, perhaps not surprisingly given the early stage of the Strategy. An alternative possibility is that the Strategy was beginning to have an effect on the Year 8 pupils in non-pilot schools as well and so the similarity of results was in part a consequence of this. Further analysis of the non-pilot Year 8 pupils' experience of the Strategy suggested no clear pattern of differences between non-pilot schools reporting limited, some and lots of experience for Year 8 pupils of the English and Mathematics strands through the national roll-out.

### Seeing positive pupil responses

We had a largely positive response from teachers about their pupils' reactions to the teaching and learning strategies that the Pilot encouraged. School strategy managers' and teachers' survey perceptions were that pupils were beginning to respond to the changes in teaching encouraged by the Pilot. Strategy managers were overwhelmingly positive (e.g. 92% in mathematics, 89% in TLF, 86% science, 84% ICT and 83% English), whereas the teacher survey produced a more mixed picture. While 58 per cent of teachers reported positive pupil responses to the three-part lesson, this ranged from 75 per cent in TLF to 46 per cent in science (mathematics was 68% and English 49%)<sup>170</sup>. Our case studies also suggested the picture was mixed, though mainly positive. We found examples of teachers seeing a change in how their pupils were engaging as a result of new teaching approaches. Some teachers commented on how they had seen improvements in behaviour as a consequence of better lessons, though one school noted an initial decline in behaviour due to the disruptive effects of using supply teachers while teachers attended training.

170 The number of ICT teachers responding to the survey was too small to carry out a similar  
171 See section 8.5.

Thinking Skills in PE. One PE department began to incorporate thinking skills into its approach to teaching sport, and pupils were expected to use thinking skills to look more critically and creatively at an activity and then to evaluate their approach. For example in athletics pupils were asked to devise and evaluate the most effective way of using four runners to get a relay baton around a 400 metre course. One reported consequence of this approach was that pupils who did not previously enjoy PE responded enthusiastically to the reasoning, creative thinking and evaluative elements.

We specifically asked teachers, school leaders and LEA staff about the learning needs of adolescents and the implications of this for teaching. The varied responses identified that adolescents bring their own culture to school. Therefore, to address this and different pupil learning styles, there was a need for a variety of teaching modes and of greater engagement of pupils. Much of what we heard concurred with Pilot approaches: for example, that teaching should be more of a partnership between teachers and pupils, the importance of assessment for learning, etc. Some respondents, however, felt that teaching and the curriculum, in particular, needed to be made more relevant for pupils in the 21st century. This suggests that perhaps the Strategy needs to be 'bolder' when developing the next phase<sup>171</sup>.

### Meeting pupils' needs

In terms of meeting pupils' self-reported needs, the Pilot and early stages of the National Strategy appear to have addressed some of these more directly than others.

### Clear learning objectives

Several of the key features which the pupils identified as helping their learning are present in the Strategy. The emphasis on clear learning objectives and explanations links directly to the subject frameworks and the guidance on teaching and learning. A number of the pupils we interviewed were encountering learning objectives in some of their lessons, which they saw as making the purpose of the lesson clearer: "Some of our teachers talk about what you're aiming for" (Year 7 pupil). This was also one of the pupil survey items, my teachers explain things clearly, on which pilot schools had a significantly higher agreement level than non-pilot schools, with two thirds of pupils agreeing (see Table 6.5D).

## Active learning

Similarly the emphasis on starters to lessons and other teaching and learning strategies such as 'misconceptions' within science and thinking skills in TLF may provide a more stimulating approach to learning. In addition, Year 8 pupils generally agreed (70%) that assessing my own work helps me learn, and this matches the self-assessment strategies encouraged by assessment for learning in the TLF and other strands.

The emphasis on a three-part lesson structure, with its 'starter' to engage pupils, appeared to address some pupil needs. We came across examples of 'active' starters, thoroughly enjoyed by pupils we interviewed, where teachers used white boards or encouraged pupils to move around in search of answers. They were described by one English strand leader as the "fun allocation – kids adore it". However, our evidence suggests that these required considerable development time and were far from being a regular feature in many classrooms. One of our international evaluators commented:

**The process of using 'mental starters' to commence lessons appears to be implemented with a great deal of variation. The fact that this strategy is not necessarily linked to the rest of the lesson raises the question of whether it is making as effective a contribution to student learning as it might do. Care will need to be taken to ensure that 'starter' activities do not become an obstacle to student learning by becoming an advanced form of 'busy work'. Some teachers do not have sufficient understanding of the nature of student learning to be able to develop starter activities that contribute to student cognitive engagement and growth.**

## Group work

At this stage the Strategy has given only limited coverage to group work. LAC Unit 7 covers models and techniques to manage group talk but we did not hear about take-up of this unit. A further comment from the international evaluator states:

**... the research literature indicates that whole-class instruction is not as effective as the best instruction that can be provided in a challenging learning environment in which small groups of students take a greater level of responsibility for the management of their own learning. There was muted evidence in the understandings of teachers of the desirability of developing students' self-regulation of their learning through the development of meta-cognitive strategies.**

## 6.5.4 Assessing Pupils' Learning

One of the key indicators of the success of the Pilot and the Strategy is improved learning during KS3. This was measured during the Pilot through performance in the Year 7 progress tests, the Year 7 and 8 optional tests in English and mathematics and the KS3 tests in English mathematics and science. Indications of broader learning and skills gained through, for example, ICT, LAC, NAC or TLF, have not been directly assessed.

### The impact of the progress and optional tests

We are cautious at this early stage about using changes in pupil outcomes to measure the Pilot's effectiveness. We found reservations in many pilot schools about the Year 7 progress and the English optional tests. We are also reluctant to use the 2001 and 2002 KS3 tests results as indicators of the success or otherwise of the Pilot, not least because pupils in Year 9 in these years would have had very limited exposure to the KS3 Strategy. Only in 2003 will the Year 9 pilot cohort have been exposed to the English and mathematics strands of the Pilot and Strategy throughout KS3, and the same will be true of the science strand in 2004.

### Progress tests

There was widespread concern in the Pilot about the value of the progress tests, which were a requirement of the Pilot in 2001. The tests were for pupils who entered Year 7 with level 3 English and/or mathematics. The tests are the KS2 tests for that year. There were questions about the validity of this as the Year 7 programme of study has a different emphasis, particularly in mathematics, and therefore pupils had not been focusing on the topics covered in the test. Year 7 teachers may also have been unfamiliar with the style of the KS2 tests. Schools reported how the experience of the progress tests had proved de-motivating for pupils who were already aware that they were unsuccessful. When teachers were asked to rate the pupil response to the progress tests only 24 per cent of the 334 respondents gave a positive rating, with 31 per cent 'mixed'. At the subject level, the responses from mathematics teachers were more positive, however, than from English teachers. A new form of the progress tests, linked to the Year 7 curriculum will be introduced in 2003.

Optional tests These also proved to be one of the most negative elements in the Pilot. Despite their title, pupils at level 4 and above in pilot schools were required to take them in Year 7. Marking was to be done by the schools with the understanding that if they submitted the data they would be able to receive aggregated pilot data for the purposes of comparison. Despite many schools preparing these data and sending it to QCA, no national data were sent to the schools.

These tests themselves were not seen as a positive experience for many pupils, especially in English where the amount of initial reading was viewed as distressing for a number of pupils. Only 15 per cent of the teacher survey respondents saw the pupils' response to them as positive. We found that even case study schools that did significantly above expectations on our value added analysis placed little confidence in the tests. The opinion was that, given the effort and disappointment involved, there were better and simpler ways of assessing progress, for example by using Teacher Assessment. The distribution of schools on our analysis may also suggest that the marking, which was not moderated, may have been of only limited reliability, particularly in English. Several Pilot schools did not take them again in 2002 when the optional tests were no longer obligatory.

### Analysis of progress and optional test results<sup>172</sup>

As part of the evaluation we undertook to analyse the pilot schools' 2001 Year 7 progress and optional test results and conduct value added analyses of matched pupil level data to provide estimates of progress at school level. The progress test results showed that for those pupils who entered Year 7 with level 3, there was only limited progression to level 4. In English, 30 per cent of the pupils achieved level 4, whilst in mathematics only 12 per cent did so. These figures were very similar to the national figures reported by Ofsted (2002). The pattern was reversed in the optional tests (intended for pupils at level 4 and above) with the majority (61%) of pupils achieving an increase of one level in mathematics, while in English only 33 per cent of pupils did so. The mathematics results in particular indicated substantial progress for pupils at level 4 and above.

For the value added analysis we used KS2 scores (a more sensitive measure than national curriculum levels) in English, mathematics and science as the prior achievement measure. Factors such as gender, age and one contextual indicator, the percentage of the school's pupils receiving free school meals (FSM)<sup>173</sup> were also incorporated. The analysis then took account of these factors in estimating what performance could be expected<sup>174</sup>.

The value added analysis showed considerable variations between pilot schools' rates of progress for all four sets of test outcomes. Larger relative differences were found between schools in English than in mathematics. What was unusual, relative to other school effectiveness studies<sup>175</sup>, were the proportions of schools that were statistically significantly above or below what would be expected of them (see Table 6.5E). The pattern for the optional tests was even more extreme in English.

**Table 6.5E**  
Distribution of value added scores (using 95% confidence interval)

	Below expectation		As expected		Above expectation	
	Progress	Optional	Progress	Optional	Progress	Optional
English	18.6% (n=37)	29.4% (n=45)	66.4% (n=132)	41.2% (n=63)	15.1% (n=30)	29.4% (n=45)
Maths	13.8% (n=28)	13.6% (n=23)	75.7% (n=153)	69.2% (n=117)	10.4% (n=21)	17.2% (n=29)

n = number of pilot schools

Schools' performance across the four tests was not particularly consistent. Only a quarter of schools were either consistently above or consistently below expectations on at least three of the tests, though very few were highly ineffective on one test and highly effective on another. This suggests, not surprisingly, that the subject department is likely to be an important factor in accounting for differences in performance. There was no evidence of strong differential effects within a school, for example, that it had been more effective for girls than boys. In terms of school effects, social disadvantage (based on the FSM percentage) showed a negative effect on all four tests, though some disadvantaged schools performed above expectations. After controlling for prior attainment school size also showed a significant relationship with pupil gains, with pupils in larger schools (1500+) showing poorer gains.

172 See Annex E for summary of technical report.

173 A number of other school context indicators were also tested but not included as they were not significant.

174 These comparisons are relative to pilot schools only. Equivalent data sets for non-pilot schools were not available. No judgment can therefore be made about the value added improvements in pilot schools relative to non-pilot.

175 Sammons, P., Mortimore, P. and Thomas S. (1997) *Do Schools Perform Consistently Across Outcomes and Areas* in J. Gray, D. Reynolds, C. Fitz-Gibbon and D. Jesson (eds) *Merging Traditions: the Future of School Effectiveness and School Improvement* London: Cassell.

## 2003 Key Stage results

We have chosen to downplay the use of the 2002 KS3 results as an indicator of the impact of the Pilot Strategy. This is because it is not until 2003 that pupils will have been exposed to the Pilot and Strategy for the full three years of KS3 in English and mathematics, and not until 2004 that the same will be true for science.

## Booster classes

Some Year 9 pupils may, however, have benefited from the provision of booster classes, intended primarily for Year 9 pupils who are borderline level 4/5. The ratings for booster support in our teacher survey showed that 44 per cent of the 250 respondents rated them as effective, with 36 per cent uncertain, and only 20 per cent of teachers thought they were ineffective. In our interviews there was evidence of a positive response from some pupils who had appreciated the extra effort made (the classes were often timetabled outside regular classes and even in the holidays). There were also comments that, while useful, booster classes seemed to be more of a 'quick fix' at Year 9 than an integral part of the Pilot, which was concentrating on Years 7 and 8.

## 6.5.5 Summary

Two of the key aims of the KS3 Pilot Strategy were to increase pupil engagement and improve attainment. At this stage we found little difference in underlying attitudes to schooling and learning between pilot and non-pilot Year 8 pupils, with both groups showing generally positive attitudes to their commitment and learning. There was evidence from our case studies of some positive pupil responses to elements of the Strategy, particularly clear learning objectives.

In relation to pupil attainment, there were considerable reservations from pilot teachers about the value and impact of the 2001 progress and optional tests. The progress tests showed some gains for level 3 pupils in English, but less so in mathematics. The situation was reversed for pupils at level 4 and above who took the optional tests.

## 6.6 Differentiation in Implementation and Impact

No two schools, departments, teachers or pupils are the same. This section explores whether there are features of the Pilot Strategy that were more suitable for some schools, departments, teachers and pupils than for others. We focus primarily on how schools responded to the demands of the Pilot and whether there were any patterns in the ways schools may have chosen to emphasise particular elements.

The intention of the Pilot was for schools to implement the elements in order to provide feedback to inform the national roll-out. We received mixed messages on whether schools should faithfully 'adopt' Pilot approaches, in order to see what changes may be needed for the roll-out, or whether they could 'adapt' Pilot approaches and give feedback on what they had done. It was also the case that some strands were more flexible than others. For example English and mathematics were seen as more prescriptive, particularly in relation to their frameworks, than science. There were optional elements in English and mathematics – for example in the training programme – though training for the core units was closely scripted. There was also seen to be more choice in TLF and science. Several ICT teachers were positive about their development role in producing materials. The roll-out has encouraged more flexibility, as confirmed in visits to a few non-pilot schools embarking on the Strategy, though there were still teachers in these schools who saw it as prescriptive.

In reality, the complexity of the Strategy has meant that pilot schools inevitably placed different value on different elements, reflecting their own needs and circumstances. We therefore looked at differences in the way the Pilot Strategy was implemented in relation to the readiness and context of the pilot schools, which ranged from those in special measures to beacon and selective schools. LEAs also reflected this diversity.

We found that all the schools we worked with were able to identify parts of the Pilot that had helped with their work at Key Stage 3. However we were interested in whether the Strategy seemed more appropriate for certain types of schools than others and whether schools in similar circumstances had responded similarly. While the Strategy was tailored to meet the needs of a wide range of KS3 pupils, with particular support for the lower attaining, there were both successes, and questions, of fit.

### Key findings on differentiation in implementation and impact

- Though the Pilot Strategy was geared to meet the needs of a wide range of pupils, it has made additional provision for the needs of lower attaining pupils.
- This provision for lower attaining pupils (e.g. catch-up) raised particular issues for schools with large numbers of such pupils.
- Teachers' expectations for these pupils, particularly in less advantaged schools, have increased.
- When schools were grouped by social background or achievement, there were few other common patterns of response across similar schools.
- There were mixed views on how well the Pilot Strategy addressed the needs of high achieving schools and pupils.
- Initially there were differing responses to the different strands. TLF, mathematics and LAC were generally well received by most schools.
- The needs and receptivity of schools led to some consultants taking different approaches within different schools.

### 6.6.1 Additional Provision for Lower Attaining Pupils

In line with other international design strategies that include an intervention element<sup>176</sup>, the KS3 Strategy has been designed to raise standards for all pupils but also places particular emphasis on meeting the needs of those pupils who arrive in Year 7 with limited attainments. Our data suggest that, as required by the Pilot, schools made additional provision for such pupils, using summer schools and catch-up provision (involving Springboard work in mathematics and Progress Units in English). We would expect this provision to have a differential impact depending on a school's intake, which in our visits ranged from over half arriving with English and/or mathematics at level 3 or below to no pupils below level 4.

176 Hill, P.W and Russell, V. J.(1999) op cit: Slavin,R. E., Madden,N.A., Dolan,L.J.and Wasik, B. A.(1996) Every ChildEvery School:Success for AllNewbury Park, CA: Corwin.

## Summer schools

The perceptions of pilot school strategy managers were that summer schools were generally a successful element in the Pilot Strategy<sup>177</sup>. Virtually all (95%) the pilot school strategy managers who responded to the survey rated them as successful, including two thirds (65%) rating them as very successful. In the teacher survey, over two thirds of the 196 responding to the item rated it as a positive experience for the pupils. This was elaborated upon in most case study interviews, the perception being that while a two week summer programme could not substantially improve literacy and numeracy skills, the pupils arrived in Year 7 with more social confidence and were better motivated than they might have been. Teachers in a few schools acknowledged that a limitation was whether the pupils who went to summer school were necessarily those who most needed it.

## Catch-up

For pupils in the Pilot who arrive in Year 7 with English and mathematics skills at level 3, schools were encouraged during training to make arrangements to provide additional catch-up support. KS3 national team members informed us that, during training, schools were encouraged to adopt different approaches to timetabling and staffing. A suggested model, which most seem to have used, was that pupils would receive three 20-minute sessions, in small groups (6-8) during or outside lesson time, and would work with the Literacy Progress Units or the Springboard materials in mathematics.

Schools, particularly with large numbers of level 3 pupils in Year 7 reported considerable difficulties managing catch-up. One school with over 50 per cent of its pupils needing catch-up had to operate 10 withdrawal groups. The logistics of this were so demanding that the school moved to setting in Year 7 so that the materials could be incorporated in regular lessons. This may help with the concerns of several teachers involved in catch-up that they were being expected to cover too much in a 20-minute session. However it raises the issue that pupils in 'catch-up streams' may then fall behind in covering the Year 7 framework, as their lessons may be based on catch-up materials rather than the frameworks.

Several schools experimented with classes outside the regular timetable – early morning, lunchtime and after-school. Teachers in particularly disadvantaged schools commented that some pupils saw catch-up classes outside school hours as a punishment. One school tried withdrawing pupils for English catch-up during registration periods but moved to timetabled 'rotational withdrawal' from other subjects, with "more success and less stigma".

Those responsible for teaching catch-up groups varied. In some schools it was the special educational needs co-ordinator's (SENCO) responsibility. In one case study school, the SENCO was responsible for over 80 catch-up pupils, including preparing and conducting progress tests. An issue here was that the English department had very limited involvement and awareness of what was involved. In other schools, teaching assistants were used. Their LEA had trained some of these.

Our research found that the model of regular withdrawal for catch-up groups poses considerable problems for schools with large numbers of level 3 pupils. While several of these saw a move to setting as a solution, this may have unintended consequences in terms of engagement with the KS3 frameworks.

## Inclusion and the Pilot Strategy

The Pilot was intended for all pupils in KS3. Some of these pupils, particularly those whose numeracy and literacy were at level 3, have received additional support. The question was raised by those working with KS3 pupils below, or just at, level 3 about the lack of materials specifically for this group. While materials for pupils experiencing more severe learning difficulties were being developed and pilot LEAs had incorporated special schools into their implementation, there may have been a gap in provision for this particular group of low attaining children in mainstream schools.

Some of the pilot schools were also concerned about the message Year 9 booster classes sent to pupils who were unlikely to reach level 5 and were not, therefore, involved in booster support. To deal with this, one school offered English booster classes to all pupils. Another modified the booster materials for pupils unlikely to reach level 5 – with some positive consequences (see boxed example). While booster classes were plainly seen as a useful and, hopefully, sure way of increasing short-term gains, one headteacher summarised the reflections of a number of others in commenting: "improving test performance is not the same thing as improving learning".

Boosting motivation. One school brought in former staff to take the after-school booster classes for 50 pupils for two evenings a week for 10 weeks. The head of Year 9 also ran weekly after-school revision classes with modified booster materials for a further 50 pupils who were less likely to reach level 5. In a school that experiences attendance problems there was a 100 per cent turnout for the KS3 tests and the pupils "were brilliant" about taking the tests seriously.

177 It should be noted the Ofsted evaluation findings were more critical – Ofsted (2002) *The Key Stage 3 Strategy: Evaluation of the First Year of the Pilot* London: Office for Standards in Education HMI 349.

## 6.6.2 Differential Impact of the Pilot: More Impact on Less Advantaged Schools?

We were particularly interested in whether schools in very different circumstances responded differently to the Pilot. One approach to this was to analyse responses in terms of the perceived impact of the Pilot. Taking the 20 schools with sufficient responses to constitute a 'school view'<sup>178</sup>, we looked at groups of items (factors) in the survey that teachers seemed to view in similar ways. One emerging factor was related to how teachers perceived the impact of the Pilot on their own practice and collaboration and discussion with colleagues. We identified three groups of schools on the pilot impact factor: high (most favourable views), medium and low (least favourable views) impact.

We compared the contextual characteristics of these three groups of schools and found that the high impact schools had a significantly higher percentage of pupils eligible for FSM and there were significantly more smaller and medium sized schools in the high impact group.

### Increased teacher expectations in less advantaged schools

The impact finding may link to a pattern of increased expectations in lower achieving schools. In an earlier section, we have reported a general increase in teachers' expectations. When we re-analysed the teacher survey, classifying teachers in relation to the percentage of their schools' pupils on FSM, we found differences between schools in teachers' responses to the item the KS3 Pilot has led me to set more challenging targets for my pupils. While average agreement was 59 per cent, those teachers from high FSM schools had substantially higher levels of agreement (see Table 6.6). Pronounced differences may stem from teachers in high achieving schools, with low FSM percentages, being more likely to claim that they already set demanding targets. If this is so, more is now being expected of pupils at all levels of attainment suggesting a possible positive differential outcome of the Pilot, although other initiatives such as target setting may also have influenced teachers.

**Table. 6.6**

Teachers' responses to setting more challenging targets for pupils analysed by percentage of pupils on FSM

THE KS3 PILOT HAS LED ME TO SET MORE CHALLENGING TARGETS FOR MY PUPILS						
%FSM	0-5	5-9	9-13	13-21	21-35	35+
% agree	35	48	54	56	73	79

### Valuing targets

Our pupil attitude survey showed a range of differences in attitudes and motivation towards school. However there was evidence that pupils in lower achieving schools preferred targets to help them improve their work in relation to pupils from higher achieving schools (66% against 56%), and had them set more frequently. Year 8 pupils in a disadvantaged school told us: "Targets are what we want to aim to do"; "They set targets in tests: it gives you something to work at"; Year 9 pupils in the same school thought: "Targets help evaluate how you can improve"; "They're helpful because they are guides, and you can follow and see how well you are doing". Some pupils were, however, unclear about the purpose of targets. When we analysed survey responses about targets in relation to whether or not pupils reported receiving extra help in school, we found a highly significant difference between them, 79 per cent of those receiving help in pilot schools preferring targets compared to 59 per cent not receiving extra help.

This preference for targets can be linked to the views of Year 8 pupils in our survey that what helps their learning most is clarity about what they are learning and what they need to do. Lower attaining pupils may well have less understanding of what is required of them in lessons<sup>179</sup>.

### Booster classes

We found a similar pattern of results when we compared schools with different percentages of FSM against the effectiveness of booster support. Just under two thirds (63%) of teachers in the 21-35% FSM range rated them as effective compared with 20 per cent in schools with 9-13% FSM. Again, an interpretation might be that higher achieving schools already provide revision for KS3 tests and may have fewer borderline level 4/5 pupils. This differential finding

<sup>178</sup> See Annex D.

<sup>179</sup> Rudduck, J. (1996) Lessons, Subjects and the Curriculum Issues of 'Understanding' and 'Coherence', in J. Rudduck, R. Chaplain and G. Wallace (eds) School Improvement: What Can Pupils Tell Us? London: David Fulton.

might also be interpreted positively in terms of a wider range of pupils receiving help. This could also be indicative of pupils valuing teaching that makes them understand better what is expected of them.

## Stressing literacy

We found that another pattern was that, unless there were staffing difficulties, most schools in more challenging areas emphasised Literacy Across the Curriculum (LAC). We visited several schools which operate in more difficult circumstances, particularly with low levels of literacy. A number of these chose to focus on LAC. However, one case study school in similar circumstances was not able to implement the LAC programme until the end of the first year of roll-out due to staffing difficulties in the English department.

We found no other clear patterns. For example, among our case study schools we had schools facing challenging circumstances and beacon schools where, in both, the headteacher and other senior leaders successfully used teaching and learning in the Pilot Strategy as the basis for whole school improvement. For other schools, raising standards in the core subjects was their main interest, and TLF was either viewed as a distraction or, in the case of schools in difficulties: "too much, too soon". Similarly, we visited schools in very different circumstances where the impact of the Pilot was largely restricted to a departmental level.

## Meeting the needs of higher achievers

We also looked at what the Pilot Strategy offered higher attaining schools and pupils, identified in relation to KS3 results. Our evidence was mixed. When teachers were asked to rate which pupils had responded most positively to the Pilot, they reported that almost two-thirds of higher attaining boys had responded positively compared with just over a half of average attaining and a third of lower attaining boys. There was a similar pattern for girls. While the finding begs a number of questions, for example whether higher attaining pupils generally respond more positively to their teaching, it suggests there has been a positive response from many higher attaining pupils.

Our school visits, however, revealed a far more mixed picture. Some of the higher attaining schools, particularly those basing their reputation on examination results, sometimes appeared less involved in the Pilot Strategy. We found several English departments in higher attaining schools that felt the Strategy was not really appropriate, especially where there had previously been a heavy emphasis on literature, as they thought it denied their pupils some of the opportunities for in-depth reading: "No time for

whole texts". We also had comments from other teachers how starters were seen as a distraction by some higher attaining children who "want to get on with the nitty gritty" or that in mathematics "the three-part lesson may not suit the most able". Against this, we had comments on the positive response to learning objectives, thinking skills and assessment for learning from this group of pupils.

In academically selective schools<sup>180</sup>, funded provision for catch-up work and booster classes may appear less important, although we did come across one which 'adapted' booster classes to coach pupils for the KS3 extension papers intended for pupils functioning above level 6.

## 6.6.3 Differential Strand Responses

In all the schools we visited there was evidence that some features of the Pilot had been taken up enthusiastically. TLF and mathematics were the most frequently positive areas with over half our case study schools seeing them as areas of real progress, and teachers in these subjects rating the support they had, both from outside and inside, as more effective. There was also consistent support for LAC. Responses for English, science, ICT and NAC were far more mixed.

Teachers involved in TLF were consistently the most positive about both their training and the effects on their teaching. This may partly be accounted for by the greater autonomy these teachers enjoyed in selecting which aspects of the TLF strand they wanted to develop and incorporating them into their current practice. When asked whether the Pilot reflected their own views of teaching and learning, 88 per cent of TLF teachers agreed compared to 62 per cent in mathematics and 45 per cent in English. This was also reflected in fully 98 per cent reporting benefits to their teaching. The emphasis on pedagogy was viewed as one of the strengths of TLF. One LEA KS3 strategy manager articulated the thoughts of most of the others: "TLF has allowed us to get in to pedagogical issues of good quality teaching and good quality learning".

We also found generally positive attitudes from mathematics teachers. In relation to English teachers, they were significantly more positive about their pilot training, consultants' support and advice, the benefits for their teaching and the pupils' responses to the three-part lesson. Year 7 pupils also made more progress in the mathematics optional tests<sup>181</sup>, although lack of comparable data for non-pilot schools means that this may not be a direct consequence of the Pilot. Our case studies suggested that there was fairly widespread support for the mathematics framework: "Brilliant document – well thought through by

180 There were only two of these in the Pilot.  
181 See section 6.5.4.

whoever did it. Even if KS3 strategy finished I wouldn't go back. I would still use it" (mathematics strand leader). A concern for some schools, however, was about giving up published mathematics schemes they had found successful but did not fit with whole class approaches, and a particular issue was the number of non-specialist teachers who were involved in teaching mathematics because of national teacher shortages. While strand leaders were generally pleased that the framework was both detailed and accessible to non-specialists, some LEA consultants and line managers were concerned about the level of understanding and were working to try to deepen this. This raises a double-edged issue related to subject knowledge. One question is whether non-specialists really have the necessary subject knowledge to teach at KS3. The other question is, if the approaches within the frameworks can be delivered by non-specialists, to what extent are they deepening the practice of subject specialists?

The response in English was far more mixed. This had been anticipated since the English strand, with its emphasis on literacy, reflects a different approach to English than the literature-based approach of many schools. This was reflected in less than half of English teachers (45%) responding to the teacher questionnaire agreeing that the Pilot reflected their views of teaching and learning. The implication of this is that the implementation of the English strand may be a slower process, though over time may lead to more radical changes in teaching practices. There was, however, a generally more receptive attitude to the LAC materials and training. While we met a number of English teachers who remained sceptical about the value of the English strand, we also met those who had shifted their position dramatically after seeing pupils' progress. A number of English teachers also saw the positive side of the changes, illustrated in one English teacher's comment:

**Dividing up a lesson with this particular model has changed my practice. It isn't especially easy, but I can see the benefits.**

Reactions from science teachers were also less consistently positive. Here, also, there were concerns about the effectiveness of the training, including demonstration lessons, the draft framework, and the length of the auditing process, despite finding it useful (although they acknowledged that the process had been reduced in the roll-out, in response to feedback from schools). For some schools, staffing shortages in science had been compounded by training demands. However, we found considerable enthusiasm for some of the science teaching

strategies: "Different teaching strategies, learning styles, are making science interesting" (science teacher). Some science strand leaders also appreciated the flexibility of being able to select from different units, while a couple of others found the choice somewhat overwhelming.

We met fewer ICT teachers because of the small number of LEAs and schools involved in the initial Pilot. Generally, they embraced their task with enthusiasm, and were pleased that ICT was receiving acknowledgement as an important subject in its own right<sup>182</sup>. Late arrival of some of the ICT materials caused frustration for a few of the teachers we interviewed, but there was appreciation of the opportunity to influence the development of the strand.

In one LEA, there appeared to be a general concern among ICT teachers that some of the materials were pitched at too high a level. In another school, the ICT lead teacher reported that the school did not use some of the Year 8 materials because they had already been covered in Year 7, and the school was comfortable with the flexibility of being able to choose. Smaller schools found it a greater challenge to manage the ICT Pilot because of small numbers of staff and a number of teachers who only had a part-time responsibility for ICT. While not an intention of the Pilot, the potential for impact across the school was also limited in small schools, although we came across some teachers who were involved in separate cross-curricular initiatives.

#### 6.6.4 Differential Consultancy Support

We found evidence that LEAs and consultants took a differentiated approach to supporting pilot schools, depending on the nature and success of the school, department or teacher and changing needs over time. This was partly in line with the Government requirements for 'intervention in inverse proportion to success'<sup>183</sup>, and often linked to the LEA 'schools of concern' or 'additional support' procedures<sup>184</sup> designed to channel more support systematically into schools in need. Several larger LEAs indicated that their choices for schools to support in the second year of the Pilot were based on pupils' progress and the value which schools were adding from entry to the end of KS3.

Some consultants, in particular, appeared to be skilled at working differently to suit the needs of different teachers. Visits indicated that consultants used a variety of means to guide them in allocating support to teachers, departments and schools. Strand audits provided a basis for action plans where resources and support could be identified.

<sup>182</sup> See, however, section 6.4.2.

<sup>183</sup> DfES (2001) Code of Practice on Local Education Authority – School Relationships, DfES Guidance, Reference number DfES 0027/2001.

<sup>184</sup> DfES (1999) Schools Causing Concern, DfES Circular number 06/99.

**Differentiated action planning** At one training session, a science consultant asked strand leaders to bring along their action plans. She showed them how to “traffic light” their action plan. This was an idea she told she had got from a school and adapted: “highlight it green if you have done it, amber if it’s been partially met and red if it’s on the original action plan and nowhere near but a priority. If it’s not a priority, don’t highlight it”. As teachers discussed their plans with colleagues, she moved around helping individuals with particular issues and asked a couple of strand leaders at the end if they would mind sharing their action plans with specific colleagues in other schools.

While consultants were often able to recognise what intervention may be best for a particular school or department, it was sometimes difficult to develop these. Several consultants spoke of departments where they were only permitted to work with ‘good quality’ teachers, but were prevented from observing or working with weaker teachers. For others it was the opposite, as they were asked to focus their work on individuals with particular needs. These included newly qualified teachers, weaker teachers, including supply teachers who were not familiar with either the school or KS3 Strategy, as well as teachers who were engaged in capability procedures.

We also heard from some consultants who decided, sometimes following discussion with the school strategy manager, that if the subject leader was blocking progress they would work with keen and effective teachers in the department: “the mover and shaker [who] is prepared to change their own practice” (science consultant). This appeared to produce fresh and rapid growth in some departments and new patterns of leadership, occasionally leading to the promotion of the key person within or out of the school. Sometimes the tensions and conflicts in such situations became very difficult for consultants and seriously impeded progress. One mathematics consultant found herself as the “go-between” in a department where relationships had broken down.

We found that by the later stages of the Pilot, some LEAs and consultants were beginning to make more explicit what consultants would be engaged in when visiting a school. Two LEAs were developing agreement forms in which both school and consultant would agree in advance what both were expecting from the visit. One advantage of this was seen as the school being clear about the purpose

of the visit, rather than reacting once the consultant arrived. We have noted elsewhere that feedback from some consultants indicated the need for more emphasis in training on better understanding of how to manage work in schools. This has been addressed in the national roll-out.

### 6.6.5 Summary

The purpose of the Pilot was to determine how effectively the Strategy met the needs of a wide range of schools and how it could be modified to further improve its effectiveness. Because of its scale, we have seen a variety of responses, even from very similar schools, with each choosing to emphasise what met their current needs and circumstances. We have noted that the explicit emphasis on lower achieving pupils appears to have led to raised teacher expectations, particularly in less advantaged schools. However managing some of the provision for the lower attaining pupils, particularly where there were relatively large numbers of them, has been problematic for some schools. We also found that some of the elements of the Strategy fit more comfortably with teachers’ own views of the subject or teaching and may therefore have had a more immediate impact than others did, for example TLF, mathematics and LAC.



# Chapter 7: Successes and Issues

Our research has identified a number of successes and issues related to the KS3 Pilot. In the previous section we have already discussed some of the high points and challenges related to particular themes. We now draw these together.

## 7.1 Successes

Our research highlights seven notable implementation successes.

### Successes in implementing the KS3 Pilot

- Raising the profile of KS3
- Focusing on teaching and learning
- Raising expectations
- Indications of positive reactions from pupils
- Investing in support for schools and teachers
- Responding to feedback from schools
- Pilot schools' and LEAs' commitment to working through complex change issues

### Raising the profile of KS3

The middle years of schooling cover a critical period in adolescents' lives, and yet it was accepted that prior to the Pilot and Strategy, KS3 was given relatively low priority. We received a very clear message that the Pilot and Strategy have placed the middle years of schooling firmly on the map and have emphasised that success at this key stage is vital to further progress of young people. Every school we visited acknowledged that there was room for improvement at KS3 and that the Pilot served as a vehicle to develop this phase of schooling.

Before the Pilot, in many schools, there was little prestige attached to teaching at KS3. The Pilot raised the status of teaching at this phase, as well as giving teachers new leadership opportunities.

### Focusing on teaching and learning

A major success, as seen by those involved, was the opportunity for teachers to focus on teaching and learning: something that clearly mattered to them and related directly to their work in the classroom. This focus both engaged teachers and helped them extend their repertoire of teaching and learning approaches.

### Engaging teachers

We noted four reasons why, over the Pilot period, teachers began to respond positively to the Pilot. First, many reported that they saw Pilot teaching and learning strategies work for themselves, and their pupils. Second, it gave them the opportunity to reflect on their teaching and learning approaches. Third, while Ofsted inspections, performance management, threshold assessment and other initiatives have meant that teachers have become more used to their classrooms being observed, most teachers have experienced this as being monitored or evaluated. By contrast, many teachers in pilot schools were becoming aware that one of the models of staff development promoted by the Strategy – coaching – was intended to be supportive, and help them be more reflective about their own practice and help them to work on development areas in a safe environment. Fourth, a considerable number of schools had already begun to focus on learning and teaching initiatives and found the whole-school elements of the Strategy extended their thinking, dialogue and practice about teaching and learning.

Teachers involved in two of the strands – TLF and mathematics – were particularly positive about Pilot teaching and learning approaches, and LAC was well received in many schools. Mathematics teachers also appeared to respond especially well to the Pilot framework.

### Extending repertoires

There was clear evidence that teachers had started to incorporate or further develop a range of teaching and learning approaches promoted by the Pilot into their practice. These included:

- learning objectives;
- structuring and pacing of lessons;
- questioning;
- modelling;
- investigative work;
- thinking skills;and
- assessment for learning.

## Raising expectations

Raising expectations of pupils was an issue that the Pilot specifically set out to address. Our research indicates that many teachers reported that their expectations had been raised, and that some acknowledged that they had underestimated what pupils were able to do at the end of KS2. Objectives appeared to have helped raise expectations by focusing teachers' work more clearly.

In particular, more teachers in schools in disadvantaged areas reported that they were setting more challenging targets for their pupils as a result of the Pilot. Many of the pupils in lower achieving schools, usually in more disadvantaged areas, found having targets more beneficial than their peers in higher achieving schools. It appears, therefore, that while target setting was not specifically a Pilot approach, it had been successfully used by many teachers in such schools as a lever to challenge pupils towards working at a higher level.

## Indications of positive reactions from pupils

During our case study visits, we came across many examples of teachers reporting increased engagement of pupils as a result of Pilot teaching and learning approaches. While these were generally not borne out in changes in underlying attitudes to schooling, they were presented to us as successes and had often been the impetus for teachers being willing to commit themselves to engaging further with Pilot and Strategy approaches. Given that change takes time, that most teachers were still at a relatively early stage of implementation and that some had extremely limited experience of Strategy activities, it is perhaps not surprising that underlying attitudes had not yet shifted.

## Investing in support for schools and teachers

The investment in support for Pilot schools was enormous and was generally greatly appreciated by those in schools. More important, it helped them in their focus on teaching and learning. This support included funding, training, materials and frameworks, on-site consultancy support, websites, networking meetings, and a range of activities specific to different LEAs. It appeared that it was often the combination of support strategies that seemed to make a difference to schools.

The support of consultants seemed to be a particular strength, especially school-based work targeted to departments' and individual teachers' needs. The benefit of consultancy support was, not surprisingly, most strongly experienced by those who spent the greatest amount of time with them.

## Responding to feedback from schools

The purpose of the Pilot was to trial both the content of the Strategy and the means of implementing it in order to learn lessons to feed in to later stages of the Pilot as well as the national roll-out. Feedback mechanisms were, therefore, built in to the process. Pilot schools and LEAs reported that they appreciated the opportunity to influence the Strategy and found that many of their suggestions were taken up: for example changes to the frameworks, simplification of the auditing process, introducing strand leadership training, and modification of the progress tests. In addition, we heard that some LEAs were modifying their training arrangements according to schools' needs.

## Pilot schools' and LEAs' commitment to working through complex change issues

The Pilot was introduced at relatively short notice and made a number of demands on already busy teachers, schools and LEAs. Despite this, we found evidence that most schools and LEAs invested enormous energy and commitment to implementing the Pilot and trying to make it work. Schools and LEAs responded rapidly to getting the infrastructure for change in place – for example, appointing strategy managers and others to lead or line manage strands. While we encountered a number of setbacks related to staffing and leadership, we were struck by people's determination to work through difficult issues.

## 7.2 Issues

Inevitably, change efforts face difficulties. Indeed, researchers of school improvement have argued that if there are no problems, then probably very little is happening<sup>185</sup>. Here, we identify eight issues that created challenges for Pilot schools and LEAs.

### Issues in implementing the KS3 Pilot

- System-wide constraints
- Time for change
- Superficial versus deep change
- Making connections for whole-school improvement
- The limits of 'cascading change'
- Listening to the pupil voice
- Measuring the Strategy's effectiveness
- Capacity and context matters

185 Miles, M.B. and Huberman, M. (1984) op cit.

## System-wide constraints

Implementing reform always takes place within a national context. This was true of the KS3 Pilot. The issues facing schools and LEAs during the Pilot were, for the most part, not caused by it but, as unintended consequences, some may have been exacerbated by it. Those issues particularly affecting Pilot schools and LEAs were: teacher shortages, especially in core subjects; availability of high quality supply teachers; general workload issues sometimes leading to stress; and competing initiatives. In some cases, these significantly held up or set back progress with implementation.

## Time for change

While time is a constraint, we have presented it separately because of the frequency with which it was reported as a difficulty. Indeed, insufficient time to carry out all the necessary activities appeared to be the overriding issue for those trying to implement the Pilot in schools and LEAs. Particularly, time to ensure training was disseminated, and planning occurred was in short supply, and the opportunity for teachers to reflect on and improve new practices was extremely limited. Some schools appeared to be more creative than others in finding time, but most found it extremely challenging, and some departments had very infrequent meetings. For most people, deep and embedded change takes a long time, and even bringing about moderate changes requires time.

## Superficial versus deep change

Our research found that teaching and learning changed for a considerable number of teachers in Pilot schools. The depth of that change is less certain. Deep and lasting change is extremely time-consuming and requires enormous commitment and regular practice. While a large number of teachers in Pilot schools experienced aspects of the Pilot and, in the case of some of the more straightforward changes, had begun to incorporate them into their practice, this appeared in a considerable number of cases to be 'skin deep'. Discussions with teachers demonstrated that considerably fewer had reached the stage where the Pilot had led them to deep reflection on their practice. Our evidence is limited as to the extent to which teachers' pedagogical subject knowledge has been enriched and enhanced during the Pilot.

Similarly, a number of the changes in KS2-KS3 transition activities still appeared to be at the level of induction, data exchange and familiarisation with practice at KS2. While some schools were involved in joint teaching and learning initiatives and there were examples of LEAs facilitating collaborative curriculum initiatives, it was acknowledged that there was still some way to go.

## Making connections for whole-school improvement

The KS3 Strategy was designed to address education for 11-14 year olds across the whole of the secondary curriculum. As such, it is aiming to transform teaching and learning across whole schools, not just within individual subject departments. It has been described as a single Strategy, but clearly has a number of strands. A key issue for schools and LEAs appears to have been the 'connectedness' of the different strands. This is a particular challenge because of the nature of the secondary school curriculum and structure of secondary schools into separate departments or faculties. The message coming through from a number of schools was that those responsible for creating and delivering the policy needed to help them make connections in order to see the overall picture.

The scale and complexity of the Pilot means it can be "read" as essentially a subject-based innovation or as a teaching and learning innovation which can be applied across subjects. We found both readings during our school and LEA visits. The choice often depended on local circumstances and preferences. For many English and mathematics teachers, the Pilot was largely subject-based with elements of teaching and learning, such as questioning skills, seen as part of subject skills. This sometimes appeared to lead to a limited appreciation of the wider teaching and learning issues. Despite the cross-curricular nature of LAC and NAC in the first year of the Pilot, it was with the introduction of science and, particularly, TLF that a broader view of teaching and learning among many pilot schools emerged. This is what appeared to lead them to see the Strategy as a whole-school teaching and learning initiative, and would also be more likely to lead to school-wide, rather than just subject, improvement.

Limited connections with parents as part of the Pilot also meant that a potentially valuable resource for improvement was not harnessed.

## The limits of 'cascading change'

Our research found that the external Pilot training appeared to be beneficial for many teachers who experienced it. A great challenge, however, was disseminating this information to colleagues in school. This was partly because of time issues mentioned above, but also because the experience of being trained did not necessarily mean that teachers knew how to train their colleagues and support their development. Enthusiasm and impetus was lost in a number of schools we visited because structures were not in place in schools or strand leaders lacked the experience or confidence to support colleagues' learning. Some school leaders did not appear to understand the benefits of school-wide structures for ensuring that teachers could work together on a regular basis. 'Cascading change' is a process that does not end until it reaches the pupils.

## Listening to the pupil voice

Pupils have important ideas about what helps them learn better. We have highlighted the positive attention to teaching and learning. We were interested in hearing what the pupils, themselves, had to say about their learning. Our pupil survey suggested that some of these ideas linked to elements of the Strategy, for example the need for clarity about what is being learned and what needs to be done. Elements of some of the Pilot strands, such as 'misconceptions' in science, and assessment for learning, actively seek to understand what pupils know and use this formatively to enhance teaching and learning. The issue is whether in the emphasis on teaching and learning, enough attention was paid in the Pilot to understanding pupils' learning, especially from their viewpoint and then considering the implications for teaching<sup>186</sup>. There is considerable evidence that learning about learning enhances performance<sup>187</sup>. This raises the question whether the well-worn phrase 'teaching and learning' should evolve into 'learning and teaching'<sup>188</sup>.

## Measuring the Strategy's effectiveness

The Briefing for Pilot Schools (2000) provided a series of measures by which the KS3 Strategy's success would be measured. These fell broadly into categories of engagement and attainment. Engagement involved indicators such as improved attendance, reduced exclusions, improved pupil attitudes and motivation. Attainment involved continuous improvement, meeting targets, and improved attainment by all pupils across English, mathematics and science at Year 9.

A key issue in measuring engagement is how to ensure that the engagement indicators are given sufficient weighting in relation to attainment indicators. Some indicators of engagement, for example attendance, exclusions and monitoring pupils' attitudes, did not appear to be systematically addressed in the Pilot Strategy, whereas considerable attention was paid to test results.

If the Strategy is to lead to improvements across the whole school then LAC, NAC, ICT and teaching and learning in foundation subjects may be just as critical as the core subjects in strengthening teaching and improving pupil engagement. If undue emphasis is placed on performance in KS3 tests in the core subjects, then schools may be drawn into teaching to the test rather than extending their teaching and learning repertoire.

## Capacity and context matter

Our research has reinforced findings elsewhere that implementing improvement efforts and reform is affected by the context of the schools in which it takes place<sup>189</sup>. This also applied to LEAs. The size of schools and LEAs and level of social disadvantage of the populations they served influenced both the way they implemented changes and, in some cases, the impact of these changes. For example, in more challenging contexts, releasing staff to attend training had an initially negative impact on pupils' behaviour when being taught by supply teachers who did not know them or have the experience to deal with discipline issues.

The capacity of teachers, departments and schools also influenced the way they responded to and used support and challenge, and the capacity of LEAs influenced the kind of support they offered to schools. Leadership at all levels was a key component of capacity. The patterns of influence were often subtle and complex which means that our case study schools and LEAs did not group themselves neatly on all of the indicators we explored. For example, in some schools senior leaders had a strong vision about improving teaching and learning and supported the KS3 strategy manager to make effective links between the Pilot and other initiatives. In these same schools, however, leadership of some Pilot strands was weak. In short, no two schools or LEAs are the same, and reforms will always be played out differently. This variation has to be recognised, and reform efforts need to be both differentiated and sufficiently flexible.

## 7.3 Implications

The implementation of the KS3 Pilot has resulted in a number of successes and issues. In the next section, we consider the implications of these for continued implementation, sustainability, roll-out of the National Strategy and future developments.

186 We are aware that the National Strategy's foundation subject strand's folder includes a focus on learning and learners.

187 Watkins, C. (2001) *Learning About Learning Enhances Performance*. Research Matters No. 13. Institute of Education, University of London: National School Improvement Network. An ESRC-funded research and development project – Learning how to Learn in Classrooms – is exploring further how learning how to learn relates to measured achievements and pupils' motivation: see [www.learn-to-learn.ac.uk/home.php3](http://www.learn-to-learn.ac.uk/home.php3)

188 As it has, for example, in New Zealand and Scotland.

189 Datnow, A., Hubbard, L. and Mehan, H. (2001) op cit; Mortimore, P. (1998) op cit.



# Chapter 8: Implications from the Pilot and Future Development

## 8.1 Introduction

A critical issue for the KS3 Pilot, and the Strategy itself, is whether, once implemented, the changes will be sustainable over time, particularly when other initiatives are introduced. Even successful improvement is fragile. As Fullan (2000) notes, "additional effort and development is needed for reforms to be sustained leading to continuous improvement beyond the initial investment"<sup>190</sup>. This is where capacity appears to be especially critical. Given that implementation is still at relatively early stages and this evaluation has taken place over only one year, we are not in a position to determine the extent to which any changes are likely to be long-lasting. In this section, therefore:

- we first reflect on the extent to which the Pilot appears to have been implemented;
- we then look at the features of the Pilot and other factors appearing to offer the most promise for furthering implementation and building capacity within individuals, departments, schools and LEAs to ensure depth, breadth and length<sup>191</sup> – to promote sustainability in the Pilot schools and support the national roll-out. In so doing, we highlight areas that have emerged in our research that might be further developed, drawing implications out of these for key stakeholders in the Strategy and for implementation of other pilots;
- we conclude by returning to the international literature to look to the future, putting forward issues for consideration in future development of KS3.

## 8.2 To What Extent has the KS3 Pilot been Implemented?

From our research, it appears that the basic infrastructure is largely in place in schools and LEAs, and that many, though not all, teachers have begun to use Pilot materials and teaching and learning approaches. At the conclusion of our research, some teachers had still had very limited exposure to

the Pilot and Strategy, while others were investing significant amounts of time in Pilot and Strategy-related activities.

We have evidence that practice was changing for many of these teachers, although for most it was still at a relatively early stage. Those most closely involved, who had attended the training and worked with the consultants, appeared to be thinking more deeply about their practice. A number of more confident teachers appeared to be making more sophisticated refinements to Pilot practices, retaining the original intent while deepening the approaches as they connected them to other parts of their teaching and learning repertoire. English and mathematics teachers in some schools also appeared to be further along the implementation road, but this is not surprising given that they started the process a year before their colleagues involved in other strands. There was also a greater amount of staff discussion about teaching and learning in many schools.

Given Fullan's estimation that implementation for most changes takes a minimum of two years and that larger-scale change efforts can take up to 10 years, with sustainability still potentially being problematic, this is a considerable achievement. In answer to our question How effective is the implementation of the KS3 Pilot? we can report that teaching and learning has started changing as a result of the training, practical support and materials, and that implementation appears to be leading to higher expectations, especially of lower achieving pupils. Reports from teachers about pupils' reactions were also generally positive, although there is little evidence thus far of changes in pupils' underlying attitudes. Overall assessments of pupils' progress in English and mathematics will have to wait until the KS3 national tests in 2003 when the pupils in Pilot schools have experienced three years of the Pilot and Strategy, and for science this would be 2004, given that the Pilot started one year later.

In answer to the question How effective is the implementation of the different strands? our findings suggest that implementation of the mathematics and, particularly TLF,

<sup>190</sup> Fullan, M. (2000) op cit, p.20  
<sup>191</sup> See section 2.2

strands appeared to be more straightforward for several reasons. Where the match of the strand's philosophy was closer to that of participating teachers, they were more willing to engage with the teaching and learning approaches and question their practice. Training and consultancy support was also seen as more effective by those teaching TLF and mathematics, although the LAC training was also viewed as very effective. Teachers involved in these two strands also reported a greater impact on their teaching. There were, however, no significant differences between the strands in terms of teachers' perceptions of their pupils' reactions.

### Promoting whole-school improvement

A question we set out to answer was What is the potential for the KS3 Strategy to promote whole-school improvement and transformation? Related to this, we wanted to know whether implementation of the Pilot Strategy worked better when it was part of whole-school improvement. We looked at the extent to which schools used the Pilot and Strategy as a whole as a mechanism for whole-school improvement – or at least improvement across KS3, and found five broad patterns of use.

- Very little happening in any strand. We found that this was not the case in the majority of schools. These were schools in extreme difficulty who were not at a state of readiness to take on and implement the Pilot.
- Implementing some strands but not others. We found this in a few schools. This seemed to relate to significant capacity differences between departments, as well as staffing issues. Whole-school aspects of the Pilot, such as LAC and NAC, were also implemented in some departments but not others.
- Implementing all of the strands some more successfully than others, but few cross-departmental connections were made. This was a common pattern, demonstrating some department capacity differences but also indicating a strong departmental culture, and less developed school capacity. Whole-school aspects of the Pilot, such as LAC and NAC, were implemented less consistently in some departments than in others.
- Using the Pilot and Strategy as a lever to 'transform' the whole of KS3, indicating cross-departmental connections but not a whole-school perspective. We found this in a few schools and others were working towards this. Generally, some strands were progressing more successfully than others, and attention was given to addressing strand differences. TLF, LAC and, sometimes, NAC were used as cross-curricular bridges. The links between the Strategy and other initiatives were being explored. This appears to indicate development of school capacity.

- Using the Pilot and Strategy as a mechanism for whole-school improvement. We found this in very few schools. Overt efforts were being made to link the Strategy with other initiatives, using them to influence teaching and learning throughout the entire school. Some strands were still progressing more successfully than others, and focused attention was given to addressing strand differences. The schools appeared to be characterised by cross-departmental collaboration, committed senior leadership, a shared vision, communication and trust, and support and time for innovation. Such schools, in particular, were able to see the connections between strands, as well as harnessing TLF, LAC and NAC to encourage greater collaboration across the school. This appears to reflect higher school capacity.

## 8.3 Deepening Implementation

There is further work to do if the Strategy is to be fully implemented in Pilot schools. This has implications for those inside and outside schools.

### Deepening implementation

- Time to cascade training and develop practices
- Leadership for change
- Continued support from consultants for teachers
- Differentiated support
- Flexible training
- Support for consultants
- Continuing to develop KS2-KS3 transition
- Drawing on what pupils have to say about their learning to build new teaching and learning approaches
- Helping schools and LEAs make connections
- Finding different ways to evaluate the success of the Pilot and Strategy
- Attending to constraints within the system

### Time to cascade training and develop practices

One of the strongest findings has been the difficulty that schools have had in creating time for teachers to get together with colleagues in their department, share and develop training ideas, plan, and reflect on their practice. However good the teaching and learning approaches within the training, the chain breaks down at the point at which communication stops. Until time for development is created, there will always be a possibility that certain individuals will have extremely limited experience of Strategy practices.

## Leadership for change

Effective leadership of individual strands appears to be critical to successful implementation. Support is being provided in the Strategy through a range of training modules and some schools have found creative ways to support and develop those responsible for strands. Given the turnover of strand leaders, and with other new staff joining schools, some of whom may have little or no experience of the KS3 Pilot or Strategy, continued investment will be needed to help leaders get 'up to speed' with the Strategy and understand how to implement it within their context.

In addition, implementation progressed more smoothly when supported by the senior leadership team and implementation across the whole school appears to have been more effective when senior leaders focused on the teaching and learning implications.

## Continued support from consultants

At least at the early stages, until sufficient expertise is built up within the school, it is important that teachers continue to be supported by external consultants. In smaller LEAs, with fewer schools, ongoing support is available during the roll-out. In larger LEAs, however, a phased system has been put into place, prioritising schools with the greatest need according to value added progress measures or other measures used by LEAs. This means that some schools will not receive support from a consultant for a couple of years. While those in most need are generally continuing to be supported, there will be a number of schools that will miss out on the opportunity for this kind of critical friendship, and it will be important to create other development opportunities to help implementation proceed.

## Differentiated support

We found a number of differences between the schools and LEAs that affected the way they implemented the Pilot and the benefits they appeared to derive from it. For example, addressing literacy difficulties was more of an issue in some schools than in others. Small schools and those in particular areas where recruitment and retention was an issue faced other challenges, as did those with particularly large numbers of pupils with limited attainments. It appears that there is a need for extra targeted support – staffing, finance, training units, other professional learning opportunities and materials – for such schools. This would also apply to schools involved in the roll-out.

## Flexible training

Some LEAs have adapted their training schedules and even brought training sessions into schools to involve more people. This flexibility has been appreciated by schools. If LEAs are able to provide even more flexible training and professional learning opportunities, for example, for small or rural schools, those with recruitment and retention problems or supply cover difficulties, there may be direct benefits.

Blocks of training time are hard to find. Creative approaches to training using staff training days, time off in lieu, additional closures, negotiated weekends, etc. might be explored. In the US and Canada, voluntary week-long summer institutes are offered as one form of professional development.

Pilot training was also sometimes heavy on content and seen as rushed. If the Strategy encourages active learning, how much can participants try out practices and work through tasks? Less content and more active social processing may result in greater learning.

## Support for consultants

Consultants have generally felt well supported, but they have encountered a range of different situations and teachers, departments and schools with very different capacity. Sometimes, they were unprepared for dealing with difficult change issues, for example conflict resolution and negotiation. Consultants are likely to benefit from ongoing support in the skills of supporting and challenging change, which is now a feature of the training for national support in the roll-out.

## Continuing to develop KS2/KS3 transition

While there has been an increase in transition activity and some indications of improvement in professional understanding between teachers working in these two key stages, LEAs have an important bridging role that can be further developed. This might include, for example, bringing together teachers from both phases for joint moderation of pupils' work, sharing of schemes of work, discussing teaching and learning approaches, and joint transition action research projects. There also appears to be a need to continue to develop systems for the earliest possible transfer of KS2 data<sup>192</sup>.

192 The DfES's recently introduced Common Transfer File is one attempt to strengthen transition.

## Drawing on what pupils have to say about their learning to build new teaching and learning approaches

Feedback from schools and LEAs has been incorporated into Strategy developments. This research, in common with other research<sup>193</sup>, has found that the pupils have ideas about what helps them to learn. Some of the results are compelling, reinforcing what is known about adolescence. For example, if nine out of 10 like learning in groups, what might this mean for Strategy teaching approaches? Similarly what are the implications of the strong preference for the more active and practical subjects? Stakeholders at all levels may want to consider how best the pupil voice can be heard and acted upon.

## Helping schools and LEAs make connections

A question we set out to answer was How do schools most effectively integrate the KS3 Pilot with other school and Government initiatives? We found that some did this successfully by linking them with an overall vision, thereby creating coherence. Others had much greater difficulty. The message that came through is the need at policy and national team level to highlight the connections. This is particularly important given that many schools and LEAs see the Strategy is, or needs to be, about teaching and learning. It is also more likely to lead to school-wide, rather than just subject, improvement.

Further connections with parents might also be explored, in view of links identified between their role and student engagement<sup>194</sup>.

## Finding different ways to evaluate the success of the Pilot and Strategy

At present, while various measures of success were identified in the Briefing for Pilot Schools (2000), the success of the Strategy is largely measured in terms of test results in core subjects. Yet the Pilot and Strategy set out to achieve a range of aims. To check implementation over time, it would be valuable to repeat the pupil survey, as well as considering new ways to evaluate aspects of teaching that the Strategy is promoting and broader ways of assessing learning.

## Attending to system constraints

Throughout our results section, we have highlighted issues in the current national context that have affected implementation of the Pilot and first year of the roll-out. These include teacher shortages, teachers' workload, difficulty of obtaining supply teachers and, sometimes, supply teachers' ability to deal with pupils in schools in more challenging contexts. Teacher shortages are a policy issue that goes beyond the KS3 Strategy, but while these continue, implementation may be jeopardised in affected schools.

Supply teacher issues affected a considerable number of schools. We understand that KS3 training units have been made available for supply teachers of English and mathematics, and would think that it would be worthwhile to extend this to the other strands so that supply teachers are familiar with the principles and practices of the Strategy. Some schools found benefits to employing teachers on short-term contracts and offered them training that benefited both the teachers and the school.

There were also general workload issues, and the Pilot exacerbated workload in some schools. These issues, as discussed in our literature review, are likely to have an impact on continued implementation. They are also likely to influence sustainability. This is partly because they have significantly affected implementation in many schools and it is not possible to sustain something that has not been fully implemented. It is also because, if they persist, they will directly influence teachers', departments' and schools' capacity to embed Pilot approaches. At a policy level, it is also important to recognise the potential extra pressure of each new initiative and avoid introducing competing priorities that are likely to inhibit sustainability.

193 For example, Rudduck, J. and Flutter, J. (2002) Pupil Participation and pupil perspective: carving a new order of experience, *Cambridge Journal of Education* 30 (1): 75-89; Muschamp, Y., Stoll, L. and Nausheen, M. op cit.

194 Silins, H. and Mulford, B. (in press) Leadership and School Results. In K. Leithwood, P. Hallinger, K.S. Louis, G. Furman-Brown, P. Gronn, B. Mulford and K. Riley (eds) *Second International Handbook of Educational Leadership and Administration* Leuven: Kluwer Press.

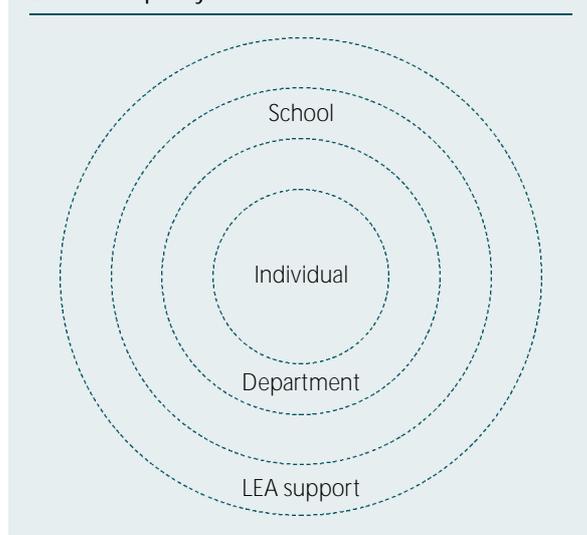
## 8.4 Building Capacity for Sustainability

Another question we asked was To what extent is the implementation of the KS3 Pilot dependent on the capacity of individual teachers, departments, schools and LEAs?

We focused on four levels of capacity: individual, department, school and external support<sup>195</sup> (see Figure 8):

- Individual This is personal capacity: in particular, we have been interested in the knowledge, understanding, skills and attitudes of individual teachers.
- Department This is a level that has been neglected in many explorations of capacity but comes through in this research as extremely important to successful implementation and sustainability of the KS3 Pilot and Strategy. It includes department leadership, interpersonal relationships and collaborative work.
- School This includes senior leadership, interpersonal relationships and organisational structures that create, develop and sustain individual and collective capacity. It involves developing the professional learning community and creating shared knowledge and understanding of ways forward to promote progress and development of all pupils.
- LEA support While this encompasses aspects of the other three, LEA personnel, including consultants, are highlighted as the most direct mediating link with, and support, for the KS3 Pilot and Strategy.

**Figure 8**  
Levels of capacity



Capacity building is concerned with creating the internal and external conditions, culture, experiences and opportunities for people to learn and develop, both individually and collectively<sup>196</sup>. In this section we set out to answer our question What support and challenge is required to build capacity for successful implementation and sustainability of the KS3 Pilot? We explore how Pilot activities have helped build capacity or have the potential to help build capacity, and identify areas that might be explored for their potential impact on sustainability.

Before outlining these, it is necessary to caution that the system constraints we discussed in relation to implementation, if unresolved, are likely to have a negative impact on sustainability.

### Building capacity for sustainability

- Building individual capacity
  - Coaching
- Building department capacity
  - Ongoing attention to subject leadership
  - Team learning
- Building school capacity
  - Creating professional learning communities
  - Changing organisational structures
- Building LEA support capacity
  - Expanding the team
  - Extending networking opportunities
  - Developing further ways to enhance inquiry mindedness in schools

### Building individual capacity

Most of the Pilot training programme and support materials focused on enhancing individual teachers' practice. When LEA strategy managers, line managers and consultants were asked in their survey what it would take to sustain the changes, the most frequent response (given by 29%) related to within-classroom development and embedding, whether through consultancy support, individual reflection and experimentation, or coaching and mentoring colleagues. We have already described a range of activities to enhance implementation.

<sup>195</sup> This conception of capacities draws on those of Mitchell, C. and Sackney, L. (2000) *Profound Improvement: Building Capacity for a Learning Community*, Lisse, the Netherlands: Swets & Zeitlinger; King, M. B. and Newmann, F. M. (2001) Building school capacity through professional development: conceptual and empirical considerations, *The International Journal of Educational Management* 15 (2):86-93; Stoll, L. and Earl, L. (in press), *Making it Last: Building Capacity for Sustainability*, in B. Davies and J. West-Burnham (eds) *The Handbook of Educational Leadership and Management* (London: Pearson Education).

<sup>196</sup> Harris, A. (2001) Building the capacity for school improvement, *School Leadership and Management* 21 (30):261-270; Lambert, L. (1998) *Building Leadership Capacity in Schools* Alexandria, VA: ASCD; Kimmelman, P. L. and Kroeze, D. J. (2002) *Achieving World Class Schools: Mastering School Improvement Using a Genetic Model*, Norwood, Mass.: Christopher-Gordon Publishers; Stoll, L., Fink, D. and Earl, L. (2003) op cit.

## Coaching

The potential of coaching has already been highlighted. The trusting and sustained relationship that can be built up between colleagues, allowing individuals to interrogate their practice at a deeper level, is particularly important to embed Pilot practices. The use of videoing techniques, already a feature in several pilot schools, appears to be an avenue that might be explored further. Time is necessary for teachers to coach each other. Other ideas from the Pilot to promote coaching include creating a special post of responsibility for a lead coach, and enabling linking up teachers in small departments with their counterparts in other schools.

There is a potential danger to making externally selected content the focus of coaching. This might inhibit teachers from exploring other aspects of their own teaching that influence pupils' learning. In the spirit of flexibility that is being promoted in the roll-out, it will be important for teachers to have the opportunity to use techniques like coaching and videoing to stimulate their own informed and supported professional judgements on aspects of their classroom practice that could benefit from further development.

## Building department capacity

Department capacity is influenced by department leadership, as well as relationships, communication, support within departments, and opportunities for collective learning and development. The request for the strand leader plus a key teacher from the department to attend training might be seen as one form of promoting department capacity by promoting teamwork and development. It appears that the intention of the cascade process has been for departments to work closely together developing short-, medium- and long-term plans based on the framework documents and schools' existing schemes of work, as well as feeding back ideas from the training. While there has been some funding in the Pilot for time for joint work, in every school we have visited, and in survey responses, time has been one of the issues raising most difficulties for teachers.

## Ongoing attention to subject leadership

There are still elements of leadership capacity building at department level – such as dealing with difficult issues in the change process and developing a learning culture that could usefully be addressed. Some LEA survey respondents (11%) and interviewees spontaneously highlighted the need to develop leadership capacity of subject leaders as one means by which changes were likely to be sustained. Clearly subject leadership is very important, and our factor analysis suggests that teachers are more likely to rate departmental capacity as lower than whole-school capacity. Ongoing subject leadership development will be important as well as encouraging the sort of leadership among other teachers that was seen in several schools.

## Team learning

Team learning is a key feature of the MYRAD middle years project<sup>197</sup>. The most powerful innovations in the Australian Innovation and Best Practice Project also "incorporated teams of teachers learning by 'working' with new knowledge and, in the process, enhancing their understanding of the learning needs and capacities of their students"<sup>198</sup>. Opportunities for two or more people to work together, studying their practice, whether through action research, coaching, moderating pupils' work or discussing data on pupils' progress, help teachers develop shared understandings and create new knowledge about their practice.

## Building school capacity

### Creating professional learning communities

There has been considerable interest in the potential of professional learning communities to enhance schools' collective capacity for learning and continuous improvement. While the evidence base is still limited, it appears that professional learning communities are characterised by a shared vision focusing on all pupils' learning, collective responsibility for this, reflective professional inquiry, collaboration, and group as well as individual learning<sup>199</sup>. The Pilot encouraged two or more people to attend training, to provide each other with collegial support and encourage the spread of ideas. It is, however, particularly within departments and across schools that the potential for professional learning communities resides.

197 Hill, P.W. and Russell, V.J.(1999) op cit.

198 Cuttance, P.(2001) Executive Summary: Innovation and Best Practice, in P.Cuttance (ed) op cit. p. xxvi-xxvii.

199 McLaughlin, M. and Talbert, J.(2001) op cit.: Louis, K.S., Kruse, S. and Associates (1995) op cit.

## Changing organisational structures

While a few schools were experimenting with timetables and some others were revising their senior leadership structures to introduce an assistant headteacher post with responsibility for teaching and learning, we found few examples of more radical reorganisation of schools, for example to make better use of time. Embedding is unlikely if the existing structures of secondary schools – timetabling, staff meetings, deployment of staffing, location of staffroom, etc – are not adjusted to facilitate collaborative planning, studying and developing of practice, coaching, team leadership and all the other activities necessary to sustain the Strategy.

It is the cross-curricular elements that have clearest implications for collective capacity building at the school level. The whole-school LAC, NAC and TLF days were one means of bringing people together. It is also, however, in identifying common approaches to teaching and learning across strands where people are most likely to build whole-school collective understanding.

## Building LEA support capacity

We have discussed the favourable response to consultants and other support from LEAs. Schools do not exist in isolation, and there is plenty of evidence that they need external support for change<sup>200</sup>.

The KS3 Strategy was piloted in 17 very different LEAs, ranging from beacon LEAs to those requiring special measures to deliver an adequate standard of educational provision. We looked at the difference it made to pilot the Strategy in these starkly different LEAs. A key difference between them was size. It was easier to launch and maintain the Pilot in small LEAs due to the number of schools, the ratio of consultants to schools and the difficulty of travel and communications. Despite this, some larger LEAs appeared to be successful in co-ordinating their response to the Pilot. Irrespective of size, we encountered variations between the LEAs in their support capacity, influenced by several factors: leadership and management; ability to make connections; general support for school improvement; the quality of the KS3 activities; and the effectiveness of personnel employed to support the Pilot. A group of factors we described as 'contextual challenge' were also influential. The more challenging social contexts had higher levels of social disadvantage and ethnic diversity, pupils with special educational needs, and lower pupil attainment standards and progress in KS3. We found that contextual disadvantage did not inhibit some LEAs from having high support capacity.

LEAs with higher support capacity appeared to possess most or all of the characteristics outlined below.

### Higher support capacity LEAs:

- exhibited leadership through effective partnership with schools;
- had a clear vision and a comprehensive strategy for raising standards clearly expressed in the Educational Development Plan;
- leadership and management of the LEA, Pilot and Strategy were effective and mutually reinforcing;
- made connections between Government strategies, between schools, phases of education, areas of the curriculum and strands of the KS3 Strategy;
- provided high quality support for school improvement through accurate identification and careful targeting of need through a well-co-ordinated support system;
- provided high quality training to raise standards and expectations;
- promoted continuity and progression between KS2 and KS3 through data transfer and cross-phase activities;
- had well trained, managed and supported high quality consultants who were having a strong impact on schools, were able to address different needs of teachers, department and schools, and differentiate support over time.

There are several ways in which LEA support capacity might be further developed to help promote sustainability.

## Expanding the team

LEA KS3 strategy managers and line managers had a monitoring brief in the Pilot. Creating wider networks of link advisors and inspectors may help those involved develop the fuller picture of the Strategy and see how their work fits into this. For example, advisors and link inspectors might become involved in KS3 monitoring and development, taking a cross-curricular Strategy theme that could become the focus of a link advisor visit. Two-way communication flow appears to be important. A more informed approach could occur if, as happened in some LEAs, consultants made information on Strategy development available to link inspectors and, in turn, link inspectors provided consultants with an accurate picture of issues in schools.

200 Huberman, M. and Miles, M. (1984) op cit. See also Harris, A. (2002) School Improvement: What's in it for Schools? London: RoutledgeFalmer; Datnow, A., Hubbard, L. and Mehan, H. (2002) op cit.

Given the staffing pressures on schools when teachers left to become consultants, some LEAs were trying out innovative approaches to employing consultants and embedding them within the team, offering members of the LEA team part-time consultancy roles and bringing consultants in part-time to the wider LEA team<sup>201</sup>. Approaches such as this would seem to offer promise for involving more experienced staff in the KS3 Strategy and linking this in to the LEA's other work.

Consultants will continue to need their own internal support systems, as well as quality assurance procedures to ensure that as new consultants are appointed, they have the necessary skills and qualities to support schools and provide appropriate challenge.

### Extending networking opportunities

Opportunities to share good practice and discuss common issues are important to those working through issues of change. Some LEAs were creative with their networking, arranging for LEA-wide teaching and learning days and setting up complementary networking projects that drew on Strategy approaches. LEAs also had a range of other communication mechanisms to help schools share their practice, for example websites and newsletters.

### Developing further ways to enhance 'inquiry mindedness' in schools

Some LEAs provided excellent data for schools to help them in their planning, target setting and development. Some also appeared to be creative in supporting teachers' action research projects. 'Inquiry-mindedness'<sup>202</sup>, taking an open-minded, questioning approach, appears to be critical to improvement and yet many people in schools struggle with assessment literacy<sup>203</sup> and with analysing, understanding and using data<sup>204</sup>. Because of the immediate and practical nature of their work, teachers often do not get the opportunity to analyse their practice and many do not have the skills to do so. An important part of support capacity, therefore, is helping schools develop their inquiry-mindedness so they are better able to analyse their practice and how to use data to enhance it.

## 8.5 Broadening the KS3 Pilot to the National Strategy

As we noted in our literature review, one of the great challenges for policy makers is 'scaling up' reform: or achieving 'breadth' as Hargreaves and Fink<sup>205</sup> described it. Here, we answer our final question: What are the key issues in moving from the KS3 Pilot to the National Strategy, and identify the implications of the evaluation of the KS3 Pilot for the roll-out. Inevitably, many of the points in earlier sections are also relevant to roll-out schools.

It is a significant undertaking to pilot an initiative in 205 schools in 17 LEAs, but it is altogether another matter to roll it out to every secondary school in the country. It is well documented internationally that pilots and other projects experience the benefits of involving volunteers, extra finance, support and status, among other advantages. It is also the case that KS3 pilot schools and LEAs have also been subjected to extra challenges and pressures in terms of carrying out optional tests, completing monitoring reports, and giving feedback on draft documents and materials.

### Key issues in moving from the KS3 Pilot to the National Strategy

- Maintaining the focus on teaching and learning
- Ensuring that schools can see 'the big picture' as early as possible
- Drawing on the experience of Pilot schools
- Circulating capacity
- Recognising the special nature of Pilots
- Evaluating the implementation of the roll-out and impact of the Strategy

### Maintaining the focus on teaching and learning

One of the key findings of the evaluation of the Pilot has been that the focus on teaching and learning has captured the imagination of many teachers. It has fed an interest that some schools already had in investigating effective learning approaches, and some schools used it to develop teaching and learning across the school. A few others were already beginning to go beyond Strategy approaches, looking at further ways to strengthen teaching and learning, and enhance pupil engagement and progression.

201 For the second year of national implementation, LEAs have been encouraged to pursue these and other innovative approaches.

202 Earl, L. and Lee, L. (2002) op cit.

203 Stiggins, R. (1991) Assessment literacy, *Phi Delta Kappan* 72 (7):534-9.

204 Earl, L. and Katz, S. (in press) Leading Schools in a Data-rich World, in K. Leithwood, P. Hallinger, K.S. Louis, G. Furman-Brown, P. Gronn, B. Mulford and K. Riley (eds) op cit.

205 Hargreaves, A. and Fink, D. (1999) op cit.

## Ensuring that schools can see 'the big picture' as early as possible

Our evaluation found that some pilot schools and LEAs seemed to find it easier than others to make connections between strands, between the Pilot and other school priorities and between the Pilot and other Government initiatives. This appeared to help them during implementation. Those who are expected to implement national policies need help to see 'the big picture' from the beginning, and help to see the connections with other Government initiatives and complementary work of other bodies. To help schools see the coherence of the Strategy, it may be beneficial for national team members to work across strands when developing materials and training. Whole-school improvement that connects at the level of the pupil will help teachers to develop a common language around teaching and learning.

Communicating the message clearly is part of helping people to see the connections. In relation to this, signalling key priorities is important. How the Strategy is perceived and developed is important to its future direction and momentum. If this is a teaching and learning strategy for all subjects, how is this being signalled in the names of the strands?

LEAs are also having to make connections between many initiatives. The experience of Pilot LEAs suggests that the relationship between the KS3 Strategy and other initiatives needs to be made explicit in the Education Development Plan (EDP) and shorter-term plans.

## Drawing on the experience of Pilot schools

The Pilot schools have developed a wealth of experience from having tried out and evaluated KS3 Strategy approaches. Already management guides and websites contain stories of pilot schools' experiences. Mechanisms for ongoing sharing of the 205 schools' implementation stories would be useful to schools more recently embarked on the roll-out because pilot schools continue to have valuable additional experience.

## Circulating capacity

An interesting phenomenon appeared in the Pilot. As strand leaders, in particular, in Pilot schools were trained and developed new skills, knowledge and understanding, a number left their schools for promotion either to become a head of department, usually in a non-pilot school, or to

become a consultant within their or another LEA. This often caused problems for the strand's continued implementation and sustainability within the school. At the same time, however, it potentially enhanced capacity elsewhere in the system, especially if the strand leader transferred to a school with less experience of the Pilot. A similar situation occurred in some Pilot LEAs, where consultants were trained and then moved to other LEAs or to work in regional Strategy teams. While development of system capacity is desirable, this needs to be monitored so that the costs are not too great for individual schools and LEAs.

## Recognising the special nature of pilots

While pilot schools agreed to take on extra responsibilities, they also received acknowledgement, extra funding that may have enabled them to give extra responsibility points or appoint extra staff and, most important, the opportunity to feed in to the development of a national strategy. With some exceptions, most of the pilot schools were either volunteers or agreed to become involved, at the request of their LEA. While the roll-out has benefited from the changes introduced as a result of pilot schools' feedback, there has been no choice in the case of roll-out schools about being involved in the Strategy, although more flexibility has been built in. Most of the roll-out schools we visited found at least something of value in the Strategy, but engaging the commitment of teachers may be more difficult in roll-out schools. While keeping in mind the implications of cost and for training, it would be valuable to continue to seek feedback from all schools, as it appears to generate goodwill and increase commitment as well as providing potential improvements to the Strategy.

## Evaluating the implementation of the roll-out and impact of the Strategy

The main focus of this research project has been on the evaluation of the Pilot Strategy to feed in to the National Strategy. Given the differences between a pilot and large-scale reform of all the secondary schools in the country, it will be extremely important to evaluate the Strategy to learn from its implementation and track its impact over time. This will not only be of interest and importance in this country; because of the nature, complexity and size of this undertaking, policymakers in many other countries would be interested in the findings.

## 8.6 Where Next for KS3?

We have explored the critical issue of sustaining the changes already introduced and have suggested implications arising out of our research. In the light of an international body of literature about a complex and fast-changing world, and its implications for what it will take to flourish and participate as a citizen in this world, we return to the literature and raise some issues that might be considered in future refinements of the KS3 Strategy.

It has been argued that an increasingly complex global society needs educated citizens who are able to learn continuously and to work in a range of contexts<sup>206</sup>. The imperative for the knowledge society to be a caring society has also been emphasised<sup>207</sup>. Learning is increasingly seen as the key to development and to democratic society<sup>208</sup>. In a world where, increasingly, knowledge is not compartmentalised, governments in various countries are moving away from a subject-based approach to a more integrated approach to curriculum<sup>209</sup>. The inflexibility of the secondary school timetable, with its relatively short periods, has created difficulties for teachers in allowing pupils to finish off tasks and develop ideas, as well as getting to know pupils<sup>210</sup>, although benefits have been acknowledged for some lower attaining pupils. There is also evidence that pupil progress tends to level off after three years<sup>211</sup>; it would appear that it is hard to continue to make progress over a number of years doing the same things.

Earl (1999)<sup>212</sup> views the middle years of schooling from the perspective of three transitions occurring simultaneously:

- adolescents in transition from childhood to adulthood;
- the world in transition from separate societies to more complex patterns of interaction and dependence; and
- schools in transition from a style that worked well for most of the 20th century to one that will prepare students for life in the 21st century.

She concludes that reforming these years of schooling has the potential of providing young adolescents with the education that they need while, in the process, having a positive influence on critical decisions to be made about the future globally.

Looking ahead, Hargreaves et al (1996)<sup>213</sup> argue that if adults of tomorrow are to have deep understanding, teaching of today must:

- recognise different forms of knowledge, intelligences and ways of learning;
- see prior knowledge as a critical starting point for acquiring new knowledge;
- focus on higher-order learning and thinking;
- give attention to the social and emotional nature of learning; and
- tie learning to real life and provide a genuine role for students in their own learning.

On the basis of their research and development work on the Middle Years Research and Development (MYRAD) Project and the Innovations and Best Practice Project (IBPP) in Australia, Hill and Russell (1999)<sup>214</sup> identify six "strategic intentions" for middle years reform. They are:

- 1 Securing the curriculum essentials the need to articulate educational aims specific to this phase of schooling that reflect an explicit set of core values, young adolescents' developmental characteristics, and pupils' changing needs bearing in mind societal and economic changes. They propose a reduction in curriculum content and a refocusing on 'foundational' knowledge, with greater opportunity for sustained, in-depth learning.
- 2 Managing the transitions a particular emphasis on change in secondary schools, placing increased emphasis on a learner-centred, rather than curriculum-centred approach. In addition, the need to coordinate transitions "from the early years to the middle years, from the middle years to the later years, and from the primary to the secondary years"<sup>215</sup>.
- 3 Creating a new model of provision a need for a core curriculum for most middle years pupils, taught by small teams of teachers – smaller communities for learning<sup>216</sup> – sharing responsibility for 70-80 pupils, who they teach for at least two consecutive years in larger, uninterrupted blocks of time, allowing development of closer relationships.

206 Caldwell, B. and Hayward, D. (1998) *The Future of Schools: lessons from the Reform of Public Education*. London: Falmer Press.

207 Hargreaves, A. (in press) op cit.

208 Delors, J., Al Muftic, I., Amagi, A., Carneiro, R., Chung, F., Geremek, B., Gorham, W., Kornhauser, A., Manley, M., Padrón Quero, M., Savané, M.-A., Singh, K., Stavenhagen, R., Suhr, M. W. and Nanzhao, Z. (1996) *Learning: The Treasure Within – Report to UNESCO of the International Commission on Education for the Twenty-first Century*. Paris: UNESCO; Bayliss, V. (1999) *Opening Minds: Education for the 21st Century*. London: RSA.

209 Sharpe, L. and Gopinathan, S. (1997) *Effective Island, Effective Schools: Repairing and Restructuring in the Singapore School System*, in J. Tan, S. Gopinathan and Ho Wah Kam (eds) *Education in Singapore: A Book of Readings*. Singapore and New York: Simon & Schuster; Education Commission (2000) *Learning to Learn: A Report of Changes Necessary for Schools in the Twenty-First Century*. Hong Kong: Curriculum Development Institute.

210 Galton, M. and Hargreaves, L. (2002) *Transfer: A Future Agenda*, in L. Hargreaves and M. Galton. *Transfer from the Primary Classroom: 20 Years On*. London: RoutledgeFalmer.

211 Gray, J., Hopkins, D., Reynolds, D., Wilcox, B., Farrell, S. and Jesson, D. (1999) *Improving Schools Performance and Potential*. Buckingham: Open University Press.

212 Earl, L. (1999) *Education for the Middle Years: The Paradox of Hope*. IARTV Seminar Series, No. 87. Victoria, IARTV, p. 5.

213 Hargreaves, A., Earl, L. and Ryan, J. (1996) op cit.

214 Hill, P. W. and Russell, V. J. (1999) op cit.

215 Hill, P., Mackay, A. D., Russell, V. J. and Zbar, V. (2000) *The Middle Years*, in P. Cuttance (ed) op cit.

216 Task Force on Education of Young Adolescents (1989) *Turning Points: Preparing American Youth for the 21st Century*. New York: Carnegie Council on Adolescent Development.

- 4 Transforming teaching and learning giving priority to a significant and sustained focus and investment in teaching and learning, to produce autonomous learners who find schooling challenging, valuable and enjoyable. This priority includes the use of new information technologies as a key means of access to learning and sources of knowledge.
- 5 Creating outward-looking learning communities a need to create close links between the home and the school, securing families' support for and involvement in their children's learning<sup>217</sup>, as well as links with the wider community for further learning resources.
- 6 Tooling up for reform the need for middle years teachers to be qualified to promote literacy, numeracy and other core knowledge, have in-depth knowledge of at least two specialist areas, and understand strategies to integrate specialist knowledge through problem-, topic- and issues-based approaches to learning. Also, trialling, evaluating and implementing comprehensive, integrated design approaches for improving middle years schooling.

If the next phase of reform is also premised on a move towards 'informed professionalism'<sup>218</sup>, it will be important that teachers have the opportunity to engage with teaching and learning approaches at a deeper level. Furthermore, the emphasis on a broader range of learning outcomes has implications for assessment of learning. We would therefore, add two further strategic intentions for consideration:

- 7 Time for developing professional knowledge the recognition that time is critical for teachers to work together, developing, studying and refining their teaching<sup>219</sup>, drawing on understandings about learning and feedback from the pupils themselves.
- 8 Assessing what is valued placing equal emphasis on determining that schooling is making a difference to the range of desirable pupil learning outcomes for life in the 21st century, without overwhelming pupils and teachers with assessments.

Some of these intentions are different from those adopted in many of the larger middle years reform efforts and challenge the existing nature and structure of schooling. In our evaluation of the KS3 Pilot we have seen teachers, departments, schools and LEAs preparing and beginning to change schooling for middle years pupils – and a few have moved beyond this. While we acknowledge that implementation is incomplete and introducing too much change is undesirable, we believe it is important for all concerned – at whatever level of the system – to consider these ideas in further developing schooling for young adolescents in the 21st century.

217 See, also, Task Force on Education of Young Adolescents (1989) op cit.

218 Barber, M. (2002) The Next Stage of Large Scale Educational Reform in England Paper presented at the Federal Reserve Bank of Boston's Economic Conference Education in the 21st Century: Meeting the Challenges of a Changing World. June.

219 See Stigler, J.W. and Hiebert, J. (1999) op cit.





## Chapter 9: Conclusion

The implementation of the KS3 Pilot and National Strategy is a highly ambitious undertaking by a national government, drawing on a considerable amount of knowledge about successful reform and change.

The focus on teaching and learning has been welcomed and there is evidence of raised expectations and some teachers extending their teaching and learning repertoires. Training has generally been well received and consultancy support that met individuals' and departments' needs has helped implementation. Effective and committed leadership and management at all levels has proved critical to successful implementation.

The briefing for the national roll-out notes that the KS3 National Strategy is "a whole-school strategy for the long term" but for some, the necessary connections to help them set this in train are still unclear. The schools are located in very different contexts serving very different populations of pupils and certain features of the Pilot do not seem as relevant for some schools or groups of pupils within schools than for others.

Teachers, departments, schools and LEAs embarking on the Pilot also started with differing capacity to be able to take on, implement and sustain the Pilot and Strategy activity and principles. This has implications for the national, regional and local support needed to ensure successful implementation and the capacity building approaches necessary for sustainability. Certainly, some schools require more support than others, although some schools that could benefit from support or challenge do not always seek it. All LEAs, schools, departments and teachers, however, need time to be able to process, reflect on and discuss their new learning as well as planning and trying out new strategies supported by colleagues, and networking more widely to share successes and resolve common problems.

Implementation is underway but is not there yet. Sustainability will be elusive if other new initiatives have conflicting foci, if staffing difficulties constrain implementation, and if time is not created for people individually and collectively to work through and embed the ideas, practices and principles of the Pilot and National Strategy. Every school we have visited found something in the Pilot that 'fits' for them but, without continued support, the potential of the Strategy may not be fully realised.





# Chapter 10: Glossary of Terms

AHT	Assistant Head Teacher	PSE	Personal and Social/Personal, Social and Health Education (PSHE)
CASE	Cognitive Acceleration through Science Education	QCA	Qualifications and Curriculum Authority
CPD	Continuing Professional Development	SEN	Special Educational Needs
DfES	Department for Education and Skills.	SENCO	Special Educational Needs Co-ordinator
EAZ	Education Action Zone	SM	Strategy Manager
EDP	Education Development Plan	SMT	Senior Management Team
FSM	Free School Meals	Strand leader	Person leading individual KS3 strand – could be subject leader, lead teacher, or person in charge of KS3 for their subject
GCSE	General Certificate of Secondary Education	TLF	Teaching and Learning in the Foundation Subjects
HoD	Head of Department		
ICT	Information and Communication Technology		
INSET	In-Service Education and Training		
KS2	Key Stage 2		
KS3	Key Stage 3		
KS4	Key Stage 4		
LAC	Literacy Across the Curriculum		
LEA	Local Education Authority		
MFL	Modern Foreign Languages		
NAC	Numeracy Across the Curriculum		
NCSL	National College for School Leadership		
NLS	National Literacy Strategy		
NNS	National Numeracy Strategy		
NQTs	Newly Qualified Teachers		
Ofsted	Office for Standards in Education		





# Chapter 11: Appendices

## Annex A: Survey Instruments

### Implementation Survey

The purpose of this survey was to gather reactions from KS3 Pilot Strategy managers in schools on their experience of the implementation of the Pilot in their schools.

The implementation survey was sent, with a covering letter, to all KS3 Pilot schools in mid-November 2001. One hundred and thirty completed surveys (a 64% response rate) were received. Strategy managers were invited to discuss the survey items with other members of staff and 90 reported doing this, with two thirds of these having talked with heads of departments.

Strategy managers were asked various background information questions, including other initiatives that the school had been involved in over the past two years that impacted on KS3 and other roles they held within the school. They were also asked to indicate which subject departments in their school were leading the piloting of the TLF strand, at which stage their school was working in each of the strands of the Pilot and how positively the KS3 staff and pupils had responded to the various strands within the KS3 Pilot.

Survey questions focused on ratings of effectiveness of various aspects of the Pilot, how easy the school had found it to deal with various requirements associated with the Pilot, and specific successes, as well as open-ended questions on key successes and difficulties experienced.

### Pupil Survey

The purposes of this survey were to see how Year 8 pupils in the pilot schools were responding to the Strategy relative to the non-pilot schools, and to find out more generally about Year 8 pupils' learning needs.

In May 2002 pupil questionnaires were sent out to 102 schools, and one Year 8 tutor group per school was asked to complete them. The sample for the survey was 51 pairs of pilot and non-pilot schools (plus one extra pilot case study school), closely matched on factors such as KS3 attainment and percentage FSM. The survey was returned by 49 pilot and 40 non-pilot schools, an 86 per cent response rate, and involved 2151 pupils.

Pupils were asked demographic data including gender and ethnicity. The teacher filled out information about the school and the class on another form. Pupils were asked to indicate the subjects that they considered themselves to be best and worst at, as well as which subjects they enjoyed most and least.

Pupils were asked to what extent they agreed or disagreed with comments about themselves and their school, their learning, and their teachers. They were also asked to indicate how interesting they found the lessons in their various subjects.

Other questions asked pupils to describe what helps them to learn at school. Pupils were given prompts of: 'ways of working, getting special help and things your teachers do etc.' They gave quite detailed and varied answers to this request. Finally, pupils were invited to give details of whether they received any extra help at school for any of the subjects that they found difficult and ethnic background details (these questions were voluntary).

## Teacher Survey

The purpose of the teacher survey was to acquire information about the Pilot and its implementation from the perspectives of individual teachers, and to elicit their perceptions of their school as a place to work. In mid-February 2002, the teacher survey was sent to a sample of 51 schools drawn from the KS3 pilot schools. Three representative schools were chosen from each of the 17 participating LEAs. The number of questionnaires sent to each school was based on information largely gained from the implementation survey. The total number sent was 1690. Three hundred and sixty-one surveys were received from 43 schools, making the overall response rate 21 per cent. This is a relatively low response rate but is common of many current response rates to similar surveys. While the percentage return meant that we needed to be cautious in our interpretations, within this response, four of the different strands appeared to be adequately represented and there was an adequate spread of roles, including a significant number of teachers not involved in Pilot leadership positions. The range of responses suggested that those who responded were representative of a wide range of opinions, and some of those who gave positive responses also expressed concerns.

Background information such as roles within the school, department and in relation to the KS3 Pilot and main teaching subjects were collected. Teachers were asked in what stage strands that they were involved in were working at, how effective training, support and materials associated with the Pilot had been and how the Pilot had contributed to, or changed, their teaching practices in particular and school practices in general. The survey focused on ratings of pupils' responses to various aspects of the Strategy and how differently attaining pupils had responded. Open-ended questions asked teachers to list factors that had supported and constrained implementation. Items in a final question elicited perceptions on issues related to school capacity.

## LEA Survey

The purpose of the LEA survey was to gain information from LEA strategy managers, line managers and consultants about aspects of the Pilot, their role within it, and more general information related to the capacity of the LEA.

Of 184 surveys sent in January 2002, 81 were returned (a 44% return rate).

LEA staff were asked to indicate their role in the Pilot, as well as schools' stage of progress, teachers' responses to each of the strands and to rate aspects of the Pilot implementation in relation to their own support and perception of the Strategy. They were also asked how successful their LEA had been in several areas associated with the Pilot.

Open-ended questions sought information on key successes and difficulties reported by schools in connection with implementing the KS3 Pilot and reasons, areas in which they considered their LEA to have been most and least effective and reasons, and the most important factors in sustaining changes and raising standards at KS3. Respondents were also asked to agree or disagree with certain statements regarding their own LEA in terms of leadership, support and communication, and to list factors within the LEA which had supported or constrained implementation of the Pilot.

## Annex B:

### Distributions of Pilot School Samples Relative to National Distributions on Free School Meals and KS3 Attainment

#### Free School Meals

Autumn package distributions	All Schools n=3153	All Pilot Schools n=205	All Case Studies n=52	In depth Case Studies n=12
0-5%	11.0	5.9	11.5	16.7
5-9%	20.5	15.8	15.4	25.0
9-13%	15.9	16.7	17.3	16.7
13-21%	20.3	25.1	21.2	16.7
21-35%	17.9	21.7	17.3	8.3
35-50%	10.0	8.9	11.5	8.3
50%+	4.4	5.9	5.8	8.3

N.B. Grammar schools were not included in the distributions as they are not included in Autumn package benchmarking of FSM. There were no grammar schools in the 52 or 12 case study samples.

#### Key Stage 3 attainment – Percentage attaining level 5

Autumn package distributions	All Schools n=3124	All Pilot Schools n=205	All Case Studies n=52	In depth Case Studies n=11*
95% & above	5.2	1.0	4.0	0.0
75-95%	18.4	13.9	12.0	27.3
25-75%	53.8	50.5	52.0	36.4
5-25%	18.3	30.7	28.0	27.3
0-5%	4.1	4.0	4.0	9.1

\* data not available for one school.

N.B. This table shows the Autumn Package 2001 benchmark cut offs for the individual subjects of English, Maths and Science were combined to form an overall Key Stage 3 attainment grouping.

## Annex C:

### Timetable of Evaluation Programme

Summer and autumn terms 2001

- Preliminary visits to 16 pilot schools in 13 LEAs, including revisits to two schools.
- Interviews with key policy makers and leaders and members of the national development team to understand the policy in intentions and mechanisms.
- Examination of policy documents, materials and internal evaluation reports.
- Attendance at conferences for regional directors and for consultants.
- Survey of pilot schools' KS3 strategy managers.

Spring term 2002

- Survey of LEA KS3 staff and consultants.
- Analysis of 2001 progress and optional test results.
- Teacher survey in 51 schools, three per pilot LEA.
- Intensive three-day case studies start in six representative pilot LEAs and 12 pilot schools (two in each LEA). Interviews plus attendance at training, briefing, INSET, consultancy activities.
- School visits by Australian consultant.
- Visits to schools and LEAs to follow up specific issues emerging in the research.
- Visits to schools and LEA involved in national roll-out.

Summer term 2002

- Year 8 pupil survey of 52 pilot schools and 52 matched (on FSM and KS3 attainment) non-pilot schools.
- Case studies continue. Completed late July.

## Annex D: Capacity Factor Analysis

In order to explore capacity in relation to our teacher survey data, further statistical analyses were undertaken to identify possible underlying dimensions in the pattern of responses. Principal components analysis was used to test associations among teachers' responses to particular sets of questions, using items where teachers' ratings were based on a 5-point scale<sup>1</sup>.

We found that teachers' responses to the 25 questions included in this analysis grouped into distinctive and interpretable dimensions:

- 1 The first main dimension can be seen to provide an indicator of School Capacity, including items that were drawn from prior theoretical work on the construct of capacity: beliefs, inquiry, community, connections, emotions, motivation, creating, practising, and leadership<sup>2</sup>.
- 2 The second dimension identifies aspects which we interpret as Personal and Collective Impact (including perceived benefits for teaching of the Strategy).
- 3 The third dimension can be interpreted as relating to Departmental Capacity, both generally and in relation to the implementation of the Pilot

The concepts of School Capacity and Departmental Capacity are clearly very important in considering the implementation and impact of the Strategy, while perceptions of Impact (including perceived benefits of teaching) are likely to affect teachers' motivation and commitment to implementing the Strategy.

Further analyses suggest that there is variation both amongst individual teachers and between schools in teachers' responses in terms of these four dimensions. Taking teachers' responses where eight or more teachers from an individual school responded to our survey, we have been able to explore the extent of consistency/variation between teachers in the same schools and variation between schools. For 20 (of the 51 schools in the teacher survey sample), eight or more teachers responded to the survey (a total of 227 teacher replies). Looking at their responses in terms of the four factors and dividing these in to three groups – high (most positive), middle, and low (least positive) – on the basis of average scores, we found the following patterns:

- For the School Capacity dimension, out of the 20 where sufficient responses were available for analysis at the school level, nine schools could be classified as high in terms of perceptions of capacity, seven schools could be classified as middle and four schools formed a low group.
- For the Personal and Collective Impact dimension, somewhat lower numbers fall into the high category (6 schools), with positive teacher ratings of the Pilot's impact. More fit the middle group (8 schools) and six are classified in the low group, with the least positive teacher ratings of impact.
- Results for the dimension related to Departmental Capacity indicate that six schools could be classified as high, seven as middle and seven as low. This suggests that, from teachers' responses, schools varied more in terms of Department Capacity than School Capacity.

Background information on the School Capacity and Impact factors schools is given in the following tables.

### Eligibility for Free School Meals

Number and % of Schools	Low		Middle		High	
	Capacity	Impact	Capacity	Impact	Capacity	Impact
0-5%	0	2 (33.3%)	1 (14.3%)	1 (12.5%)	2 (22.2%)	0
5-9%	2 (50.0%)	2 (33.3%)	0	2 (25.0%)	2 (22.2%)	0
9-13%	0	0	2 (28.6%)	1 (12.5%)	0	1 (16.7%)
13-21%	1 (25.0%)	2 (33.3%)	2 (28.6%)	1 (12.5%)	2 (22.2%)	1 (16.7%)
21-35%	1 (25.0%)	0	1 (14.3%)	2 (25.0%)	3 (33.3%)	2 (33.3%)
35-50%	0	0	1 (14.3%)	1 (12.5%)	0	2 (33.3%)
School n	4	6	7	8	9	6

Capacity: There was no significant difference between groups for % eligibility for FSM ( $p > 0.05$ ).

Impact: A significant difference was found between groups when using % FSM ( $p < 0.05$ ), with higher FSM found in the high impact group.

1 Principal components, Varimax rotation produced a 4 factor solution.  
2 Stoll, L., Fink, D. and Earl, L. (2003) op cit.

### English as an Additional Language

Number and % of Schools	Low		Middle		High	
	Capacity	Impact	Capacity	Impact	Capacity	Impact
0-5%	3 (75.0%)	6 (100.0%)	7 (100.0%)	5 (62.5%)	5 (55.5%)	5 (83.3%)
5-9%	1 (25.0%)	0	0	3 (37.5%)	3 (33.3%)	0
9+%	0	0	0	0	1 (11.1%)	1 (16.7%)
School n	4	6	7	8	9	6

Capacity and impact: There was no significant difference between groups for % EAL ( $p>0.05$ ).

### School size

Number and % of Schools	Low		Middle		High	
	Capacity	Impact	Capacity	Impact	Capacity	Impact
0-600	0	0	0	0	1 (11.1%)	1 (16.7%)
601-1200	4 (100.0%)	3 (50.0%)	5 (71.5%)	6 (75.0%)	6 (66.6%)	5 (83.3%)
1201+	0	3 (50.0%)	2 (28.6%)	2 (25.0%)	2 (22.2%)	0
School n	4	6	7	8	9	6

Capacity: No significant difference was found between groups for number of pupils in school ( $p>0.05$ ).

Impact: There was a significant difference between groups when headcount was used ( $p<0.01$ ) with lower headcount found in the high impact group.

### Key stage 3 attainment (based on average across English, Maths and Science)

Number and % of Schools	Low		Middle		High	
	Capacity	Impact	Capacity	Impact	Capacity	Impact
95%+ (Highest attaining group)	0	0	0	1 (12.5%)	1 (11.1%)	0
Upper quartile – 95%	0	2 (33.3%)	1 (14.3%)	0	1 (11.1%)	0
60% – upper quartile	1 (25.0%)	2 (33.3%)	1 (14.3%)	0	1 (11.1%)	1 (16.7%)
Median – 60%	0	1 (16.7%)	1 (14.3%)	1 (12.5%)	1 (11.1%)	0
40% – Median	1 (25.0%)	0	1 (14.3%)	1 (12.5%)	1 (11.1%)	2 (33.3%)
Lower quartile – 40%	1 (25.0%)	1 (16.7%)	1 (14.3%)	2 (25.0%)	0	0
5-Lower quartile	1 (25.0%)	0	2 (28.6%)	3 (37.5%)	3 (33.3%)	2 (33.3%)
0-5% (Lowest attaining group)	0	0	0	0	1 (11.1%)	1 (16.7%)
School n	4	6	7	8	9	6

Capacity: No significant difference was found between groups for key stage attainment ( $p>0.05$ ).

We recognise that the analyses draw on relatively small sample sizes. The approach, however, helps to operationalise the construct of capacity. Furthermore, the results suggest that this is a fruitful area of investigation.

## Annex E:

# Summary Technical Report: Assessing Progress in Attainment Across Year 7<sup>3</sup>: Value Added Analyses of Year 7 Optional and Progress Tests for Mathematics and English

### Introduction

Attainment data was collected from the DfES for Year 7 pupils involved in the KS3 Pilot to help explore levels of attainment and progress in more detail than in previous evaluations of the Pilot (DfEE, 2001; Ofsted, 2002). English and mathematics results in progress tests, designed for pupils with low levels of prior attainment (those who were at level 3 at Key Stage 2), and optional tests (for those who had achieved level 4 or above at KS2) were analysed. Individual pupils' optional and progress test results were linked with measures of their prior attainment (KS2 test scores and levels) to explore pupil progress over Year 7 using value added approaches which provide estimates of school effectiveness in different outcomes.

### Aims

The main aim of the value added analyses was to investigate pupil progress over Year 7 in both English and mathematics to establish whether schools in the KS3 Pilot differed in their effectiveness in promoting pupils' achievement in these subjects. In addition, the analyses were intended to feed into the sampling process of the KS3 Pilot evaluation to help identify schools that appeared to have different capacity to respond to the Pilot Strategy.

The original tender set out the main strands for the value added analyses of progress and optional tests<sup>4</sup>, to cover two main areas:

- 1 To 'explore pupil progress and identify any differences between schools in terms of value added, controlling for differences in pupils' prior attainments'.
- 2 To 'explore equity issues. It is of considerable relevance to establish whether the achievement gap between particular groups (those from certain ethnic or socio-economic groups, or in terms of gender) reduces in schools involved in the pilot'.

The analyses were carried out using multilevel modeling, which uses individual pupil level data and allows us to take into account the relevant intake characteristics of schools as well as pupils' prior attainments when calculating estimates of school effectiveness. This means that rather than looking at absolute levels of attainment, as in school performance tables, value added estimates reflect the amount of progress that individual pupils in any specific school have made compared with similar pupils who attended other schools in the Pilot. It also allows us to establish whether particular factors are key predictors of progress after the impact of prior attainment at KS2 is controlled. For example, individual pupil characteristics such as gender or age, or other aspects to do with the composition of pupil intakes at the school level (e.g. level of socio-economic disadvantage) or type of school may also show a statistically significant relationship with progress.

In total, 205 schools involved in the KS3 Pilot had pupil scores for at least one of the four attainment outcomes in Year 7, and data was available for all four outcomes in 132 schools. Table 1 shows the number of pupils and schools for which sufficient data was available for inclusion in the multilevel analyses that were used to calculate schools' value added results. The number in Table 1 represent those pupils included in the multilevel analysis of attainment gains over Year 7. Only pupils for whom it was possible to match prior attainment details (KS2 scores in Year 6) to outcome data for Year 7 could be included in the value added analyses of attainment gains across Year 7. The original DfES datasets included larger numbers of pupils, but it was not possible to match prior attainment data for all cases. For progress tests, complete sets of outcome scores were received for 7399 pupils for mathematics, and 8744 pupils for English. For optional tests, complete sets of outcome scores were received for 23495 pupils for mathematics, and 18541 pupils for English. Approximately 70-73% of pupils for whom outcome data were available were included in the analysis of attainment gains across Year 7, except for optional mathematics where the figure was around 45%. The lower figure for optional mathematics reflects difficulties in matching prior attainment data as the relevant file only included Unique Pupil Numbers (UPN) but not pupil names.

<sup>3</sup> A fuller technical report by Sammons, P. and Smees, R. is published in the DfES Research Series.

<sup>4</sup> In some schools small numbers of pupils took both tests. Only pupils eligible to take the test were included in the analysis used to create value added scores.

**Table 1:**  
The numbers of pupils and schools used in the multilevel analysis

	Progress results	Optional results
<b>English</b>		
Pupil n	5219	12756
School n	199	153
<b>Mathematics</b>		
Pupil n	6354	10514
School n	202	169

## Main Findings

### Improvement in Attainment Levels

Children gaining level 3 in the tests at the end of KS2 sat progress tests at the end of Year 7. Children who attained level 4 and above at the end of KS2 sat optional tests at the end of Year 7.

Progress tests were used to assess gains made by pupils with low prior attainment at end of KS2 (those at level 3). In total 22% of the sample did not achieve level 4 in mathematics compared to 27% nationally. For English, 20% of the sample did not achieve level 4 compared to 25% nationally (DfES 2002). One of the aims of the Pilot was to bring more low attaining pupils up to level 4 in English and mathematics by the end of Year 7. Overall, more pupils moved up a level for English progress tests (30%) than for mathematics progress tests (only 12%). Approximately 60% of pupils who were level 3 in English at entry to secondary school remained at this level by the end of Year 7; the figure for mathematics was 79%. In interpreting these figures, it should be noted that the progress tests were designed for the KS2 curriculum, but in Year 7 of secondary school the curriculum differs in the areas covered, especially in mathematics. Thus the progress test may not be the most appropriate instrument with which to measure gains made over Year 7 for low attaining pupils. This may be compounded by Year 7 teachers not being familiar with the demands of KS2 tests. In addition, the range of performance within levels can be wide in terms of actual test scores. Thus some pupils at the lower end of the attainment range for level 3 in Year 6 may have moved up towards the top end of level 3 attainment at Year 7, but in terms of levels no change would be recorded. It should be noted that moving up one level is intended to represent approximately two years progress at the primary stage (the expectation for

most pupils is to reach level 2 at KS1 and level 4 at KS2, a change of two levels over four years).

For optional tests greater movement across levels was recorded for the majority of pupils (those attaining at expected levels for their age at KS2 i.e. level 4 or above). This trend was especially noted for mathematics. Overall, one in three (33%) of pupils moved up a level for English, whereas for mathematics the figure was significantly higher at 61%. In our sample 55.5% were at level 5 in English and 70.1% in mathematics at the end of Year 7. To place these results in context it should be noted that, overall, the expectation is that pupils should reach level 4 by end KS2 and level 5 by end KS3 (over three years).

This result suggests that for the majority of pupils who were not at the lowest levels of prior attainment in Year 7 the increase in mathematics attainment was particularly marked. The substantial difference between English and mathematics optional results may be seen in terms of departmental variations in effectiveness. It may also be possible that the KS3 Pilot had a greater impact in raising attainment in mathematics than in English. However, it should also be noted that the assessment and marking of English at KS3 has been a particularly controversial issue and it is possible that the English optional test may have been regarded as less appropriate as a measure of attainment for Year 7 pupils by some teachers (and/or it may have been harder to ensure reliability in the assessment of English optional tests which were not externally moderated). Thus we would not want to draw firm conclusions on these apparent subject differences in success in promoting pupils' progress.

### Differences between Schools

When calculating value added scores for schools in the Pilot the following factors were taken into account because they showed a significant relationship with pupil progress made across Year 7: prior attainment in English, mathematics and science at KS2 (individual pupils' test scores); gender; age within the year group; proportion of pupils within the school taking Free School Meals (FSM)<sup>5</sup>. Unfortunately, no individual pupil level data was available for some factors that may be important in accounting for variations in the amount of progress made by some pupils (e.g. the pupil's fluency in English or their FSM status).

Value added analyses of progress involve the use of complex statistical (multilevel) models to explore children's progress over time taking account of their prior cognitive attainments and other significant factors.

<sup>5</sup> For some of the models not all of the factors had a statistically significant impact on attainment so were not used.

Significant differences between individual schools were identified in terms of value added for all four outcomes investigated (mathematics and English progress and optional tests), reflecting differences in the achievement gains pupils made across Year 7. Larger differences between schools in terms of the amount of progress made by their pupils were found for English than mathematics. Differences between schools were lowest for the mathematics progress tests. When English progress test results were analysed for different aspects (writing, spelling, reading and handwriting) we find that school differences were larger for writing (intra-school correlation 0.17) than reading (intra-school correlation 0.12). In the optional test results, the value added analyses reveal large differences for all aspects covered (intra-school correlations range 0.16 – 0.17).

The intra-school correlation statistic provides an indication of the extent to which variance in pupils' progress may be attributed to differences between schools.

These findings suggest that there was greater variation between individual Pilot schools in English results than on mathematics results. For the majority of pupils with prior KS2 attainment at level 4 or above, results were more consistent between schools and the impact in terms of raising attainment levels appears to be stronger. This may suggest that the mathematics element of the Pilot may

have been implemented more consistently and/or more favourably received by mathematics than English teachers. It may also suggest that the Pilot training and/or materials were considered more useful/appropriate. Given that comparative data on non-pilot schools were not available, any conclusions about the impact of the Pilot on test results can only be speculative.

The substantial school level variation in pupil progress in English may in part reflect unreliability in the English optional test and/or in its assessment (noted above). It may also suggest that, where implemented, pupils' gains in English can be strong (a high number of significant positive outlier schools were identified). Because the marking of optional tests was internal to schools (no external moderation was employed) the finding of marked school level variation must be interpreted with caution. Sample papers were also available online for optional tests, making it possible that some pupils or schools may have used this facility, and as a consequence, been better prepared for the actual tests.

- For pupils taking progress tests statistically significant value added scores (either positive or negative) were found for 34% of schools in English and 24% for mathematics, using the 95% confidence limit<sup>6</sup> (see Table 2 below for full details).
- For pupils taking optional tests statistically significant differences in value added scores (either positive or negative) were found for 59% of schools in English and 31% of schools for mathematics, using the 95% confidence limit (see Table 2 below for full details).

**Table 2**  
Classification of Schools' Value Added Results

	-- Below expectation (95% cl*)	- Below expectation (68% cl)	As expected	+ Above expectation (68% cl)	++ Above expectation (95% cl)
<b>Progress Tests</b>					
English	18.6% (n=37)	11.6% (n=23)	42.7% (n=85)	12.1% (n=24)	15.1% (n=30)
mathematics	13.8% (n=28)	13.4% (n=27)	45.0% (n=91)	17.3% (n=35)	10.4% (n=21)
<b>Optional Tests</b>					
English	29.4% (n=45)	10.5% (n=16)	19.6% (n=30)	11.1% (n=17)	29.4% (n=45)
mathematics	13.6% (n=23)	14.8% (n=25)	40.8% (n=69)	13.6% (n=23)	17.2% (n=29)

++ p<0.05 \*cl = confidence limit

<sup>6</sup> This is the most stringent measure of significance used. The 95% confidence limit is calculated based on the residual +/- 2 standard errors. The 68% confidence limit is calculated based on the residual +/- 1 standard error.

- The size of the school effect (measured by the intra-school correlation) and the number of outliers are higher in the KS3 value added analyses than in most previous school effectiveness studies. This could be attributed, at least in part, to variation in the impact of the Pilot between departments and schools. Also teacher effectiveness studies generally show that variations in teacher effects on pupil progress over one year are usually larger than school effects. Because the evaluation measures pupil progress over Year 7 (one school year) in specific subjects, it is likely to measure teacher variations in effectiveness as well as possible departmental differences.
- Schools' performance across the four outcomes was, by and large, not consistent, being only moderately correlated. It should be noted that all correlations of value added results were positive. Results for effects on pupils' progress in mathematics showed most similarity ( $r=0.44, p<0.05$ ). This indicates that schools which were more successful in promoting the progress of the lowest attaining pupils in terms of mathematics progress results also tended to be more effective in promoting gains in the optional test. For English, the correlation was much weaker ( $r=0.18, p<0.05$ ). For English, this may suggest that departmental effects were weaker and teacher differences larger, although again it may be that the English optional tests were a less reliable outcome measure.
- Just over one in 10 schools (12%) showed consistent effects for three or all four outcomes (statistically significant outliers using the 95% confidence limit) as can be seen in Table 3. However, very few schools were highly effective in one outcome area but highly ineffective in another<sup>7</sup>.

## Equity and Differential Effectiveness

Value added scores were also calculated for boys and girls and for prior attainment groupings, to assess whether some schools were differentially effective in promoting pupils' gains in either the progress or optional test outcomes for particular groups of young people.

There was some evidence that schools may be differentially effective for average and higher attaining children for most outcomes, and also for girls and boys for mathematics progress tests. However, these differences were very modest and on the whole schools' value added scores for different pupil groups appeared to be in the same direction. There was no evidence that some schools were significantly better for one group (e.g. girls) but significantly worse on promoting the achievement of another group (e.g. boys)<sup>8</sup>. Generally therefore we can conclude that schools which were effective in promoting the progress of one pupil group tended to be more effective for most pupil groups. Likewise, schools which were less effective for one pupil group tended also to be less effective for other groups.

The impact of the LEA was also investigated, but there was no significant difference between LEAs once prior attainment, pupil background and school context had been taken into account.

**Table 3**  
Percentage of Schools with Consistent Value Added Scores

N=133 schools	Consistently positive or consistently negative	
	Three out of the four outcomes	All four outcomes
Significance at 1 or 2 SE	24.8%	6.0%
Significance at 2 SE	9.1%	2.3%

NB. For example, out of the schools that had value added scores for all four outcomes (133 schools), 25% were consistently positive or negative (and significant) across three out of the four outcomes, using the less strict definition (1 or 2 SE). Only 6% of schools were significantly positive or negative across all four outcomes.

<sup>7</sup> Approximately 2% of schools were highly effective for one subject area (English versus mathematics) but highly ineffective for the other for the progress tests, and 3% for the two optional tests. A slightly higher percentage of schools were highly effective for one test but highly ineffective for the other for English. Approximately 9% of schools were highly effective in one test but highly ineffective in the other, compared with only 1% for mathematics.

<sup>8</sup> Gender had already been taken into account in the value added analysis

## Significant Pupil Factors

The multilevel analyses also highlighted the impact of particular pupil characteristics irrespective of the school attended:

- Prior attainment was the strongest predictor of Year 7 attainment for all four outcomes at the end of Year 7. The inclusion of pupils' individual scores in different KS2 subjects as baseline predictors proved more robust than using results in the same subject only.
- Gender was significant for all outcomes. Overall, as a group, low achieving boys made significantly more gains in the mathematics progress tests than the girls, but not in the optional tests where significant differences were found only for mental arithmetic. As a group, girls made significantly more gains than boys in both the English progress and the optional tests. This suggests that the KS3 Pilot has not altered the general pattern of differences in pupil attainment identified in many studies and countries (eg the OECD 2000 research on PISA shows all participating countries have a gender gap in favour of girls in literacy and the gap in England is only moderate in international terms).
- Age within the year group had a significant and positive impact on only two outcomes: English progress and optional results<sup>9</sup>. Here the analyses show that older pupils within the Year 7 age group make greater gains<sup>10</sup>.

## Social Disadvantage

The analyses also investigated the effect of school composition on attainment:

- The compositional effect of social disadvantage (measured by the percentage of pupils taking Free School Meals) was significant and negative. Schools where higher proportions of pupils took FSM showed less pupil progress across Year 7<sup>11</sup>. This finding is in line with many studies of school effectiveness and points to the additional challenges facing schools in challenging circumstances serving high proportions of disadvantaged students. The negative relationship between pupil progress and the concentration of pupils taking FSM was significant for all four outcomes. However, although this was the general trend across the whole sample, there were some schools with high concentrations of FSM pupils that performed above expectation, and there were some schools with few FSM pupils that performed below expectation.

## School Size

School size showed a statistically significant relationship with pupil gains in three of the four attainment outcomes, after control for prior attainment, pupil characteristics and level of social disadvantage. There was a tendency for pupils who attended smaller schools (up to 500 pupils) to make greater gains while gains were reduced in larger schools (1500 or more pupils on roll). These results may suggest that it is relatively easier to introduce changes, such as the KS3 Pilot, in smaller institutions. Alternatively, the smaller scale of such schools may confer other benefits which foster effectiveness, such as better pupil-teacher relationships, a more cohesive culture, greater consistency in goals, improved behavioural climate, etc.

No other school environment factors (eg % of pupils with EAL) showed a consistent relationship with progress, so any significant findings should be treated with caution.

## Conclusions

The statistical analyses of pupils' progress and optional test results provide evidence about changes in pupil attainment and progress made across Year 7 in two curriculum areas of relevance to the stated aims of the Pilot. There is evidence that for many pupils, attainment in English and mathematics improved over Year 7. While it is not possible to draw firm (causal) connections, the results suggest that attainment in mathematics increased substantially for those pupils taking optional tests. However, without evidence from optional test results in non-pilot schools we cannot say whether progress rates are significantly higher than in other schools.

The value added analyses of schools' results indicate significant variation in effectiveness amongst schools in the Pilot. One possible explanation may be that the Pilot's impact on pupil attainment varied markedly between schools. Some schools were significantly better at promoting pupil progress in Year 7 than others. Variation between schools was substantially higher for English. The results point to possible departmental differences in implementation and impact of the Pilot. The generally greater gains in mathematics and relatively smaller differences between schools in the mathematics optional test results suggest the Pilot may have been more consistently implemented and had a stronger impact on mathematics departments than was the case for English departments. In addition, given the lack of external moderation of optional tests and continuing controversy surrounding the assessment of English at KS3, we need to remain aware that there are some limitations in the attainment evidence base available to the evaluation team.

<sup>9</sup> Handwriting only for progress results and writing and total score for English optional results.

<sup>10</sup> Pupils who had achieved level 4 or above at the end of Year 6 (KS2) were already, on average, 0.5 of a month older than those pupils not achieving level 4.

<sup>11</sup> This was calculated from the multilevel analyses.

For the pupils with low prior attainment at KS2 (those at level 3) it is hard to draw firm conclusions about impact, due to doubts about the fit between the progress test used (designed for end of KS2) and the Year 7 curriculum, especially for mathematics. It should also be noted that in the early developmental stages of the Pilot, not all of the Year 7 catch-up materials were available for use in schools, which may also have affected the results.

The value added analyses also point to the importance of social context (using the % take-up of FSM as an indicator) showing that, across all schools, pupil progress tended to be lower where there were higher concentrations of disadvantaged pupils, taking intake into account (prior attainment and pupil characteristics). Nonetheless, we found examples of more effective schools for both curriculum areas for schools with high, average and low levels of disadvantage in their pupil intakes. Thus the results suggested that, in terms of pupil progress, enhanced effectiveness is achievable for all schools, even those with the most challenging intakes. However, change is likely to be harder for schools serving disadvantaged communities and it is likely that most will require extra support. In line with conclusions from other school effectiveness studies we also found that the impact of social disadvantage on pupils' results was not eliminated across the sample of Pilot schools studied. Very few other school level variables were found to be significant, suggesting that once pupil level variable such as prior attainment were taken into account, these factors did not have a significant influence on progress across Year 7. However, for the majority of outcomes, there was still significant variation across schools, the 'school effect'. The 'school effect' should be treated with some caution. Due to the limitations of the dataset, the unexplained school level variance may, in part, reflect differences in school intake in terms of factors such as pupil level FSM, ethnicity and mobility.

In interpreting the findings about pupil attainment levels and gains made across Year 7 we recognise that only two outcomes have been studied (English and mathematics). Furthermore, a lack of comparable data on non-pilot schools means that firm conclusions cannot be drawn about the impact of the Pilot. Finally, important though these findings are, information about pupil and teacher experiences and perceptions collected by means of questionnaires and case studies of selected Pilot schools also provide vital evidence in evaluating impact, identifying areas of strength or positive outcomes, barriers to success and areas which require further development.

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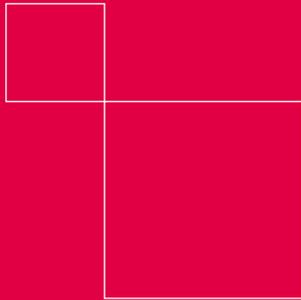
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DfES Reference number: DfES 0158/2003

ISBN Number: 1 84185 871 4

PP Number: PP47/D21/0203/43

Copies of this publication can be obtained from:

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