2020 Vision Report of the Teaching and Learning in 2020 Review Group

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Letter to Secretary of State

December 2006

Dear Secretary of State,

I am pleased to present the report of the Teaching and Learning in 2020 Review Group which I was invited to lead earlier this year.

We were asked to establish a clear vision of what personalised teaching and learning might look like in our schools in 2020. You identified this as a key educational priority; we agree that this is what every parent wants, what every child deserves and what the country needs if we are to meet the global challenges of the 21st century.

Personalising learning means, in practical terms, focusing in a more structured way on each child's learning in order to enhance progress, achievement and participation. All children and young people have the right to receive support and challenge, tailored to their needs, interests and abilities. This demands active commitment from pupils, responsiveness from teachers and engagement from parents.

Many of the elements of personalising learning set out in this report will be familiar, since they are at the heart of the very best learning and teaching. In practice, however, for most schools, personalising learning is likely to involve making distinctive changes to accelerate improvement and progression. When taken as a whole across the education system, in *all* schools, for *all* pupils, we think personalising learning has the potential to transform education.

The key challenge for the Review Group was to consider how the education system, not just individual schools, might enable learning and teaching to meet pupils' needs most effectively. Strategic action, locally and nationally, should reflect, support and extend what is already happening in this area in some schools; as we have indicated, however, it needs to do more than that. Our recommendations therefore focus on what is needed to effect systemic change.

The Group has drawn on three main sources of evidence: broad consultation and engagement with practitioners and stakeholders; visits to primary, secondary and special schools; and a wide body of knowledge relating to aspects of personalising learning. I should like to thank the many people and organisations who responded to our call for evidence, as well as those who contributed in other ways to our work. I record, too, our thanks to the Review's secretariat for its excellent support and, in particular, to Anna Paige, without whose dedication and expertise this report would not have been produced.

Cliskie Cither

Christine Gilbert on behalf of the Teaching and Learning in 2020 Review Group

Teaching and learning in 2020

In 2020, the children who started in Reception classes in September 2006 will be entering higher education or employment. Fourteen years is one entire school generation.

Most new school leaders in 2020 are now in their early years of teaching or still studying. Many of the parents of the children who will start primary education in 2020 are just coming to the end of their own schooling.¹

During their school years, children should grow from relative dependence on their parents and teachers into mature learners, with the skills to adapt to changing demands. Society's aspirations for them are expressed in the outcomes of the Every Child Matters framework: be healthy, stay safe, enjoy and achieve, make a positive contribution and achieve economic well-being.

Our vision is one in which these aspirations are realised for all children and young people. The education system will need to act now if it is to transform the experience of children starting school today. We do not underestimate the challenges involved. However, we believe that the process of achieving our vision will be an exciting one in which many schools are already leading the way. Together, schools, local and national government need to work towards a society in which:

- a child's chances of success are not related to his or her socio-economic background, gender or ethnicity
- education services are designed around the needs of each child, with the expectation that all learners achieve high standards
- all children and young people leave school with functional skills in English and mathematics, understanding how to learn, think creatively, take risks and handle change
- teachers use their skills and knowledge to engage children and young people as partners in learning, acting quickly to adjust their teaching in response to pupils' learning²
- schools draw in parents as their child's co-educators, engaging them and increasing their capacity to support their child's learning.

We believe that personalising learning and teaching must play a central role in transforming England's education service to achieve these aims between now and 2020.

Personalising learning and teaching

Put simply, personalising learning and teaching means taking a highly structured and responsive approach to each child's and young person's learning, in order that all are able to progress, achieve and participate. It means strengthening the link between learning and teaching by engaging pupils – and their parents – as partners in learning.

Some of the best schools and the best teachers are already demonstrating what these aspirations mean in practice. However, for them to be achieved for *all* children and young people, in *all* schools, *all* of the time, there will need to be changes both to the way the education system operates and to the practice of many teachers.

Box 1 Personalising learning is...

...learner-centred and knowledge-centred...

Close attention is paid to learners' knowledge, skills, understanding and attitudes. Learning is connected to what they already know (including from outside the classroom). Teaching enthuses pupils and engages their interest in learning: it identifies, explores and corrects misconceptions. Learners are active and curious: they create their own hypotheses, ask their own questions, coach one another, set goals for themselves, monitor their progress and experiment with ideas for taking risks, knowing that mistakes and 'being stuck' are part of learning. Work is sufficiently varied and challenging to maintain their engagement but not so difficult as to discourage them. This engagement allows learners of all abilities to succeed, and it avoids the disaffection and attention-seeking that give rise to problems with behaviour.

...and assessment-centred

Assessment is both formative and summative and supports learning: learners monitor their progress and, with their teachers, identify their next steps. Techniques such as open questioning, sharing learning objectives and success criteria, and focused marking have a powerful effect on the extent to which learners are enabled to take an active role in their learning. Sufficient time is always given for learners' reflection. Whether individually or in pairs, they review what they have learnt and how they have learnt it. Their evaluations contribute to their understanding. They know their levels of achievement and make progress towards their goals.

Stimulated by *How people learn: brain, mind, experience* and school.³

Why is personalisation so important now?

Personalisation is a matter of moral purpose and social justice: pupils from the most disadvantaged groups are the least likely to achieve well and participate in higher levels of education or training. Personalisation also reflects wider changes in society, which are likely to continue at an increasing rate. Together, these present the education system with its most acute challenges. They mean that expectations of what all children and young people could and should achieve must be raised, along with schools' capacity to ensure that outcomes for pupils match those expectations.

Persistent attainment gaps

We recognise the achievements of pupils, teachers, schools and government in raising overall standards over the last ten years (as measured by national assessments at the end of Key Stages 1, 2 and 3 and by public examinations such as GCSE). However, the country cannot accept a situation in which over 20% of children leave primary school without a solid foundation in literacy and numeracy or one in which over 10% of 16 to 18 year olds are not in education, employment or training.^{4,5} It seems clear to us that the education system will not achieve the next 'step change' in raising standards simply by doing more of the same: a new approach is required.

Increasingly rich data now allow national and local government, as well as schools and individual teachers, to acknowledge that there are still too many children and young people who do not achieve or who fail to make good progress through primary and secondary school. The over-representation of particular groups of pupils amongst the lowest attainers results in attainment 'gaps'.⁶ While some gaps have narrowed, for example, for black and minority ethnic pupils, others have proved to be extremely persistent nationally. This is despite overall improvement in the attainment of all groups of pupils. For example, the difference in the proportion of boys and girls achieving the expected levels in English at the end of primary school has remained fairly static since 1999 and the gap in average attainment at Key Stage 2 between pupils eligible and not eligible for free school meals has not decreased significantly.⁷ In international comparisons, while England ranks relatively highly for overall achievement, a considerable tail of underachievement is evident, most notably in reading.⁸

The gaps persist in part simply because they are difficult to rectify: the factors that contribute to them are complex and inter-related. These include individual attitudes, beliefs and expectations of pupils, parents and teachers. Closely linked to these are deep-seated social challenges, such as urban regeneration, economic development and migration. However, the gaps also persist because, for too many pupils, school does not engage them or equip them with the skills they need.

A changing world

The world changes and England changes with it. The rate of change has been accelerating over recent decades and will probably continue to do so (see Box 2).⁹ In personalising learning, schools therefore need increasingly to respond to:

- an ethnically and socially diverse society in which the gaps in achievement and prospects for people from different social and ethnic backgrounds will not be allowed to persist
- far greater access to, and reliance on, technology as a means of conducting daily interactions and transactions
- a knowledge-based economy where it will be possible to compete with developing and global markets only by offering products and services of high quality, matched closely to customers' needs
- demanding employers, who are clear about the skills their businesses need and value
- complex pathways through education and training, requiring young people to make choices and reach decisions
- a sharper focus on sustainability, the role of individuals within their communities, and their impact on the environment.

The challenges ahead

Although there are detectable trends in English society, relatively few aspects of the future can be predicted with accuracy and confidence. Meeting the challenges – both those outlined here and those yet to come – will place demands on all parts of the education system. Personalising learning offers structured ways to respond to these demands.

For personalisation successfully to meet the learning needs of all children and young people so that they make good progress, it must face up to and reduce the persistent and unacceptable gaps in average attainment between different groups of pupils. A sharp focus is needed on the essential knowledge, skills, understanding and attitudes which children and young people require in order to thrive in a changing world.

Functional literacy and numeracy are vital: it has become almost impossible to succeed without them. If pupils' oral and literacy skills are not secure when they leave primary school, they will find it very difficult to access the secondary curriculum. Without decisive intervention, they are likely to lose confidence in their abilities and their motivation to learn will decline. As boys tend to place a lower value on language and literacy than do girls, and to have a lower opinion of their ability in this area, low literacy levels are likely to have a greater impact on subsequent attainment for boys than for girls.¹⁰

Box 2 Drivers of change

While it is not possible to predict the future with certainty, previous trends can be a guide to what is more likely to occur. There are five key drivers of change between now and 2020.

- **Demographic:** There will be more over-65s than under-16s in 2020, although, after a decline, the primary-age population will be expanding. The teaching profession, on average, is likely to be younger and less experienced. While there are concerns about the health of the current generation of children and young people, generally people will be living and experiencing better health for longer. We expect to see even greater ethnic diversity, with further concentrations of minority ethnic groups in particular geographical areas.
- **Social:** We expect to see a greater diversity of social attitudes and expectations and a decline in 'traditional' family structures although not in 'family values'. Alongside social diversity will be greater religious diversity, although England will be a more secular country overall. These trends are likely to result in increasing involvement in 'single interest' politics. A greater proportion of children will have parents who were educated to university level. Gender inequality will continue to decline gradually. There is no evidence that the increasing incidence of child and adolescent mental health disorders seen over the last few decades is likely to diminish.
- **Technological:** The pace of technological change will continue to increase exponentially. Increases in 'bandwidth' will lead to a rise in internet-based services, particularly access to video and television. Costs associated with hardware, software and data storage will decrease further. This is likely to result in near-universal access to personal, multi-functional devices, smarter software integrated with global standards and increasing amounts of information being available to search on line (with faster search engines). Using ICT will be natural for most pupils and for an increasing majority of teachers.
- **Economic:** We expect living standards to be around 30% higher, with more 'luxuries' becoming 'necessities' and a greater proportion of income spent on leisure, household services, sport and culture. Higher level skills will be emphasised within a knowledge-based economy: a loss of 'mid-range' occupations will mean that young people will need to be better qualified to secure employment. Working patterns will be increasingly diverse and occupational structures less hierarchical. Workplace skills will change, requiring employees to be flexible and adaptable.
- **Environmental:** A heightened awareness of threats to the environment and the need for responsible, decisive action to counter them will mean that individuals will be expected to take personal responsibility for their impact on the environment; they will expect public services and the private sector to do likewise.

Schools also need to ensure that young people develop the skills and attitudes that employers value, many of which are becoming even greater priorities in knowledge-based economies. These are sometimes misleadingly called 'soft skills' and include:

- being able to communicate orally at a high level
- reliability, punctuality and perseverance
- knowing how to work with others in a team
- knowing how to evaluate information critically
- taking responsibility for, and being able to manage, one's own learning and developing the habits of effective learning
- knowing how to work independently without close supervision
- being confident and able to investigate problems and find solutions
- being resilient in the face of difficulties
- being creative, inventive, enterprising and entrepreneurial.

A number of factors contribute to the capability of children and young people to engage in learning and to make the most of their educational opportunities. These include being able to make good choices and decisions; an understanding of the impact of their actions – 'if I do *this*, predictably and consistently *that* will happen' – and how to influence events; and the ability (and desire) to concentrate, apply themselves to a task and persevere.

The recently published report from the Institute of Public Policy Research (ippr), *Freedom's Orphans*, analyses the increasing importance of these 'non-cognitive' factors in determining outcomes, from educational attainment to employment prospects, and in securing greater social cohesion.¹¹ The report also highlights evidence that some children are less likely to have access to experiences that help them to develop these skills and attitudes.¹² Consequently, while activities to promote such development are of value to all children and young people, they are of particular value to certain groups in closing the attainment gap.

These skills and attitudes are as important in further and higher education as in the workplace. However, the National Curriculum gives them relatively little weight and they are measured, recorded and reported inadequately by national tests and most public examinations. As a result, they are in danger of being neglected by teachers and undervalued by pupils and their parents at a time when they matter more than ever.

The best schools are already succeeding in narrowing the gaps. They are achieving very different outcomes for their pupils compared with other schools with similar pupil profiles. A strategy for closing the gap through personalising learning will therefore draw heavily on solutions adopted in schools where pupils 'buck the trend'. Such solutions may also be drawn from the experience of different types of schools, including special schools, which have considerable expertise in helping children with additional needs make good progress.

However, schools cannot be held solely responsible for 'closing the gap'. Schools in communities damaged by generations of underachievement, unemployment and social fragmentation rightly expect other agencies to help them tackle systemic barriers to raising the aspirations of children, parents and teachers. Local implementation of the Every Child Matters agenda offers the opportunity to improve continuity and progression in learning for children at risk of falling behind.

The response so far

All schools recognise these challenges. Some have identified the potential of personalising learning to offer a framework for their response, and have set about the task with energy and enthusiasm. Others are sceptical that personalising learning provides a path to improvement. Many fall between these extremes. Those schools that have responded most effectively to the challenges and opportunities of personalising learning recognise that they do not have all the answers. However, they do provide evidence of the kinds of deep changes that are likely to be necessary in tackling those challenges and opportunities (see Figure 1).

The government's education policy profoundly influences the path and speed of transformation in schools. Some recent important developments have contributed to creating a climate in which personalisation can take place:

- the encouragement of greater diversity among schools, with each developing a distinctive ethos in response to local context and in partnership with local stakeholders
- interventions designed to tackle the link between disadvantage and poor outcomes for children and young people, for example, Sure Start, extended schools, Excellence in Cities and the London Challenge
- increased collaboration: between early years settings, between groups of schools, between schools and other educational institutions, and between schools and other organisations, for example, as part of the Every Child Matters agenda and the introduction of 14-19 reforms

- emphasising the role of local authorities as champions of the needs of pupils and parents, in commissioning services for children and young people and in assuring the quality and accessibility of those services
- the national Workforce Agreement, which has clarified teachers' and support staff's responsibilities and stressed the importance of high levels of professionalism among the school workforce, enabling schools to lead change
- increasing emphasis on schools' responsibility for selfevaluation and improvement, and for contributing to gathering and disseminating knowledge about what works.

The education system is already changing in response to the challenges of the 21st century. This will and must continue, testing ways in which the challenges of a still uncertain future can be tackled. To support this, not only will the education system need to build on the foundations for personalising learning that are already in place, in schools and reflected in government policy; in addition, it must find new ways of meeting the needs of all children and young people. Decisions made by schools, national and local government and agencies in the short term could and should have a powerful and lasting effect on the character and quality of schooling in 2020.

Figure 1 – Schools' approaches to personalising learning

Challenges and opportunities

Too many children drift into underachievement and disengagement and fail to make progress in their learning.

Pupils need to become more skilled at learning new knowledge and skills, not just what the school offers today.

Today's children and young people are less passive, biddable and deferential than in past generations.

There have been dramatic advances in the availability and capacity of technology to widen access to, and options for, learning.

Schools' responses

Pioneering and evaluating approaches to learning how to learn.

Using data on pupils' learning for target-setting, tracking progress and supporting further achievement.

Engaging pupils as active partners, with responsibility for participating in designing their learning and providing feedback.

Using ICT to enhance collaboration and creative learning.

Using timetables flexibly to allow, for example, weeks devoted to intensive study or themed project work.

Designing approaches to engaging and raising the achievement of underachieving groups.

Establishing curriculum teams of staff and pupils to develop plans for improving learning and teaching.

Increasing curriculum breadth by delivering some lessons remotely using video conferencing.

Greater use of adults other than teachers to extend the range of skills and support for pupils.

PART 2

Realising the vision – designing a new school experience

High quality teaching

Any strategy for personalising learning must focus on improving the consistency of high quality teaching to meet learners' needs as effectively as possible. This means strengthening the relationship between learning and teaching through:

- using data and assessment information rigorously, together with knowledge of factors that might influence pupils' progress, to shape teaching and assess its impact
- matching high quality teaching to the different and developing abilities of pupils, focused on breaking down barriers to learning and progress and underpinned by high expectations
- regular monitoring of progress and rapid responses at the point at which pupils begin to fall behind, so that there is a relentless focus on pupils 'keeping up'
- dialogue between teachers and pupils, encouraging pupils to explore their ideas through talk, to ask and answer questions, to listen to their teachers and peers, to build on the ideas of others and to reflect on what they have learnt
- collaborative relationships which encourage and enable all pupils to participate and which develop pupils' skills of working independently and in groups, enabling teachers and pupils to move learning forward together

- judicious use of whole-class teaching, as well as one-to-one, paired and group work
- using more open-ended tasks with pupils, either individually or in groups, based on specific projects or areas of inquiry
- developing pupils' appetite for and attitude to lifelong learning.

Securing these will benefit all children and young people and help them to become better learners. They are at the heart of effective learning and teaching. However, many pupils report that their experience of school is still marked by long periods of time listening to teachers or copying from the board or a book.¹³ Personalising learning involves changing – and challenging – such routines.

The following are likely to be particularly beneficial for lower attaining pupils and so contribute to closing attainment gaps:

- a broad and rich curriculum that takes account of prior learning and experiences and helps pupils to develop the full range of knowledge, skills, understanding and attitudes
- attention to appropriate curriculum materials for example, engaging boys in reading through providing non-fiction as well as fiction

- securing expected levels and good progress for all pupils in speaking, listening, reading and writing, particularly in the early stages of learning
- strategies that enable pupils to see clearly how they are progressing, such as setting and reviewing individual targets in lessons, drawing attention to small steps in learning, and frequent, task-based feedback¹⁴
- an explicit focus on higher order thinking skills and learning how to learn, using group work, including academic peer tutoring, paired and cooperative learning^{15,16}
- study support and out-of-classroom learning that give pupils from disadvantaged backgrounds additional access to and support for learning.¹⁷

In personalising learning, teachers use their understanding of achievement data and other information about their pupils to benefit particular groups, for example, the gifted and talented, by matching teaching and opportunities for learning more accurately to their needs. When this is done in a structured and consistent way across the school, within a culture of mutual respect, the experience of those schools that are already engaged in personalising learning suggests that it leads to establishing good learning behaviours.¹⁸

Personalising learning is relevant equally to primary schools and secondary schools, although it will look quite different as children develop and move through their own 'learning journey'. Primary and secondary schools face specific challenges in personalising learning, related to their different organisational structures and the age and maturity of their learners. In the early years and in primary schools, while children can be – and in many schools are – engaged as partners in learning, teachers and parents have a far greater role in determining what and how they learn, with an emphasis on developing literacy and numeracy alongside positive attitudes to learning, and social skills. The structures of primary schools tend to make it easier for teachers and support staff to gain a rounded picture of children's learning needs, although continuity as children move through the school remains important.

The breadth and depth of learning and the number of teachers with whom pupils have contact increase as they enter secondary school and parents may find it more difficult to engage with their children's learning. It is at this stage that, for some pupils, the problem of disengagement becomes most acute. The extent to which all pupils are able to make choices about their learning increases during the 14-19 phase and also has an impact.

Primary schools to date have not been drawn into discussions about putting personalising learning into practice to the same extent as secondary schools. This is at least in part a result of the view, which we share, that the challenge of personalising learning is greater in secondary schools. However, many of its principles are seen in the most effective practice in good primary schools. The introduction of the Early Years Foundation Stage will also provide a solid basis for later learning.¹⁹

We recommend that:

 all schools should reflect a commitment to personalising learning and teaching in their policies and plans, indicating the particular strategies the school is exploring to fulfil that commitment for all children. As part of the self-evaluation process, schools should consider and report how effectively this commitment is being fulfilled.

Box 3 Tackling the gender gap

Differences in the educational performance of boys and girls are among the easiest comparative data to collect, both within schools and nationally. The generally weaker performance of boys in key areas of learning, such as literacy, is a longstanding concern.

The gap is not unique to England. Data from the Programme for International Student Assessment (PISA) 2000 showed that girls performed significantly better than boys on the reading test in all but one country. Mathematics also showed a gender gap – in favour of boys – although this was much smaller. Finland, which has had considerable success in reducing the social class attainment gap, had the widest gender gap in reading literacy.²⁰

Boys make up the majority of the 20% or so of eleven year old pupils who do not achieve the expected level in reading. Evidence from the Progress in International Reading Literacy Study (PIRLS) 2001 suggested that children in England were less likely to enjoy reading than those from other countries. Coupled with the attainment gap, this indicates that boys are seriously over-represented in the lower range of attainment and in the group of children who are least engaged with reading on leaving primary school.

The reasons for the gap are complex. Research into boys' and girls' motivation shows that differences appear from a very early age, with boys placing a greater value on and

believing themselves to be better at mathematics and science, and girls at reading and art. Pupils are motivated in different ways, for example, by increasing their level of competence, acquiring new skills or by the level of performance they reach. Pupils' perceptions of the reasons for their success or failure will also differ. Boys, for example, are more likely to attribute their successes to internal, stable causes (such as ability) and their failures to external, unstable causes (such as bad luck).

Motivation and attainment influence subject choices at GCSE and A level, which themselves influence choices about and outcomes from further and higher education and, ultimately, labour-market prospects. (By this time the inequality is reversed, with a pay gap in favour of men.)

The recently published review of early reading suggests that, while differences in performance between boys and girls emerge early, they can be countered by good quality teaching that has high appeal for all pupils.²¹ It seems that, when learning to decode and spell words, boys benefited from highly active, multi-sensory work that engaged them, for example, in physically manipulating solid letters and simultaneously hearing sounds (phonemes) and seeing the letter or letters (graphemes) which represented them. These multi-sensory approaches were associated with rapid progress in the early stages of reading: boys gained early success that they found rewarding.

Assessment that promotes learning

Realising our vision for personalising learning means that schools and teachers have to ensure that their assessment practices contribute to improving learning and teaching. Since 1998, the work of Paul Black and Dylan Wiliam has demonstrated the double impact of assessment for learning: it improves pupils' scores in national tests and examinations as well as their metacognitive skills, including the capacity to learn how to learn.²²

Assessment for learning is not new but, as much richer data have become available, it has become a more important and sharper tool, aided by developments in technology. It is not an occasional activity at the end of a unit of work, but a complex, joint activity between teacher and pupil. It helps teachers identify what pupils have or have not achieved, while pupils increase their understanding of the standard expected, their progress towards it and what they need to do to reach it. All this provides information to help teachers adjust their teaching, using five core strategies shown to have an impact on pupils' performance (Figure 2).

In implementing these strategies, teachers will choose the approaches and techniques that they consider likely to have the most significant impact, according to their pupils' responses and their own teaching style and preferences. For example, boys may respond particularly well to competitive assessment, such as the use of quick quizzes and 'sports coach'-style feedback, where the teacher suggests specifically what the pupil could do to improve his performance. Local conditions, such as the ethos and culture of the school, and whole-school systems and policies, such as those relating to behaviour management, will also influence teachers' choices.

Teachers are familiar with many of the elements of assessment for learning: they lie at the heart of outstanding learning and teaching. They involve teachers changing what they do, day by day, to respond to their pupils. When they do this within a whole-school context that establishes the priority of assessment for learning, supported by effective systems for tracking pupils' progress, the impact of assessment on learning is likely to be considerable.

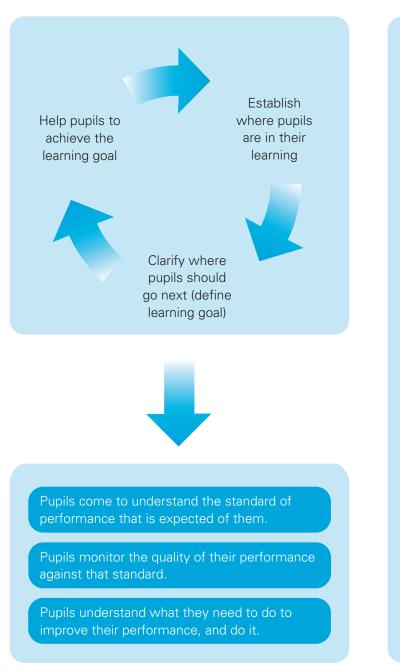
We recognise that there has been a strong focus through the National Strategies on encouraging schools to establish assessment for learning at whole-school level.²³ However, the Annual Report of Her Majesty's Chief Inspector confirmed recently that good practice is not widespread. In part, this is because teachers' use of data to inform their teaching remains one of the weakest areas of practice.²⁴ In part, also, as Black and Wiliam's work with schools suggests, it is because the kinds of 'short cycle' adaptations that lead to the most significant benefits for pupils involve teachers changing some deeply embedded habits.²⁵

We recommend that:

- the government should take further action to ensure that assessment for learning is embedded in all schools and classrooms so that its benefits are fully realised
- Ofsted should report on the practices of schools that 'buck the trend' in boys' achievement
- schools should identify their own strategies for embedding assessment for learning, reporting regularly to governing bodies on their implementation and effectiveness.

We believe that a high priority for both government and schools must be developing and implementing a new model of continuing professional development (CPD), strongly focused on the school- and classroom-based approaches that will help teachers develop new routines. We describe the features of such an approach to CPD in Part 3.

Figure 2 – The role of assessment in moving learning forward



Assessment helps teachers to collect information about pupils' achievement in order to adjust teaching to meet pupils' learning needs more fully, through the implementation of five core strategies.

1 Engineering effective discussions, questions and tasks that elicit evidence of learning

This might involve teachers developing new questioning techniques, such as waiting longer to allow pupils time to think about their answer, adopting a 'no hands up' policy or designing questions around common misconceptions.

2 Providing feedback that moves learners forward

This might involve teachers identifying selected tasks on which to provide structured comments rather than marks or grades, with a particular focus on what the pupils could do to improve their work.

3 Clarifying and sharing learning intentions and criteria for success *This might involve giving pupils access to mark schemes and asking them to mark their own, or each other's work, with reference to key criteria.*

4 Activating pupils as the owners of their own learning This might involve pupils selecting tasks from a range offered by the teacher and conducting self-assessments of their progress.

5 Activating pupils as resources for one another

This might involve pupils asking each other for help in answering a question, working in groups to tackle a task or providing feedback on each others' work.

Summative assessment and the National Curriculum

Summative assessment – the assessment *of* learning – when combined with assessment *for* learning, is a powerful tool for ensuring that all learners make good progress. It includes, but goes beyond, formal national tests and public examinations.

For example, regular assessments by teachers give information not only about individual pupils but also comparative information about different classes and cohorts of pupils and the impact of teaching. The results of such assessments can be used to give parents a clear picture of how well their children are progressing. However, such information must do more than report progress. Crucially, summative assessment must be combined with assessment for learning to enable teachers to respond rapidly in order to bring pupils back on track if they begin to fall behind. For this to happen, the information gained from high quality assessments needs to be used systematically and frequently to improve learning and teaching.

We do not consider that national summative assessment and personalising learning are incompatible. The purposes of national assessment include:

- reporting on individual pupils
- monitoring national performance
- contributing to improving learning and teaching by identifying and reporting on common weaknesses in pupils' responses
- contributing to monitoring the effectiveness of schools.

National assessment data fulfil some of these purposes better than others. In particular, the data do not always enable teachers to use them in diagnosing common problems and improving learning and teaching. Nor do they recognise and record adequately the extent to which pupils have developed the skills and attitudes we noted in Part 1, which are increasingly important to later outcomes. We acknowledge that dealing with these issues presents complex challenges. However, we consider that those challenges must be faced as a priority as part of the development of personalising learning.

While there are no formal restrictions on when National Curriculum assessment takes place, in practice, schools have tended to enter pupils for assessments at the end of each key stage, because of the requirement to report on progress at these set points. Recently, many secondary schools have increased the number of pupils entered early for national assessments and public examinations, enabling them to progress at a pace that matches their learning better. We believe there is a case for increasing further the flexibility of national assessment to enable all pupils to demonstrate their level of achievement when they are ready.

The National Curriculum is the basis for assessment: it describes an entitlement to learning for all pupils in terms of the knowledge, skills, understanding and attitudes they are expected to develop. Although it was never intended to describe the whole curriculum, many primary and secondary schools nevertheless perceive it as being too extensive and prescriptive, with too little scope for local flexibility. Recent moves to tackle concerns about the secondary curriculum have resulted in the review of Key Stage 3, led by the Qualifications and Curriculum Authority (QCA).

While considerable flexibilities exist, schools do not use these to the extent they might. For example, the time required for each subject is not statutory and there is no requirement that curriculum content should be taught in subject blocks. Schools are able to open up curriculum choice to pupils, for example, through project work, out-of-classroom activities and offering clubs within and beyond the school day. Many already do this very effectively. However, to realise the curriculum's full potential, some schools will need help to understand what flexibilities look like in practice and how barriers to innovation may be lifted. We explore this in Part 3.

Subject choices have always been a feature of pupils' final years of secondary school. The government's 14-19 reforms offer a significant opportunity to extend the range of learning pathways for young people: specialised Diplomas,

Apprenticeships and the International Baccalaureate alongside GCSEs and A levels. As these reforms are implemented, it will be vital to ensure that the choices young people make at 14 do not commit them irreversibly to pathways that may turn out to be inappropriate. Monitoring the take-up of the different pathways (at school, local and national levels) will be important to guard both against differential ambition for particular groups of pupils and against extending gender-stereotypical subject choices. Teachers, careers advisers and Connexions personal advisers therefore have a key role in guiding pupils as they choose their learning pathways.

The rationale for having some form of a National Curriculum holds now – and will do so in 2020. During this time, there will be changes to it, and its assessment, beyond those already planned. The statutory responsibility for keeping the curriculum under review and advising ministers on changes rests with the QCA, although a number of other bodies, in particular Ofsted, hold evidence on the impact on schools and pupils of the National Curriculum and its assessment. In recent years, reviews have focused on specific stages of schooling and have tended to deal separately with the curriculum and assessment. We believe that future changes should be informed by a shared understanding of the National Curriculum and its assessment (from the Foundation Stage to 14-19) and of the key issues affecting both.

We recommend that:

- the Secretary of State should commission a group, involving the QCA and Ofsted together with serving secondary and primary headteachers, to report as a matter of priority on the actions needed to ensure that the National Curriculum and its assessment develop in ways that are supportive of the vision set out in this report. The group should make recommendations by September 2007. Areas for the group's consideration should include:
 - evidence for the impact of the National Curriculum and its assessment on schools and on groups of pupils (with an emphasis on underachieving groups and the gifted and talented)
 - evidence for the use of curriculum flexibilities
 - ways in which teachers should increase their use of summative assessment for diagnostic purposes
 - addressing ways in which national assessment should be revised in response to personalising learning, for example, increasing the scope of testing 'when ready' and developing formal metrics for 'non-cognitive' skills.
- schools should consider how best to ensure that their curriculum and associated assessment support personalising learning, making use of existing curriculum flexibilities and reporting on progress to their governing body.

Pupils taking ownership of their learning

Pupils are more likely to be engaged with the curriculum they are offered if they believe it is relevant and if they are given opportunities to take ownership of their learning.²⁶ Learning, clearly, is not confined to the time they spend in school.

However, schools have a central role in helping pupils to develop the skills and attitudes for learning, on which they can draw throughout their lives. We take seriously findings that suggest that failure to do so adequately may result in stubborn barriers to pupils' progress.²⁷ A core feature of personalising learning, therefore, must be to ensure that these are as much the hard currency of learning as, say, knowledge of subject content. Teachers and other adults in school have an important role in setting clear expectations and modelling positive attitudes, particularly for pupils whose experiences outside school may not reinforce the importance of learning.

We agree with the analysis of the Specialist Schools and Academies Trust that a combination of assessment for learning, learning how to learn and pupil voice has the potential to contribute to developing all aspects of learning (see Figure 3).

In schools where the greatest progress is being made in these areas, teachers and pupils are developing a more sophisticated language with which to talk explicitly about learning and how it can be explored and improved. Such 'learning conversations' between teachers and pupils, as well as between pupils, enhance pupils' engagement in their learning and their confidence to improve it (see Box 4).²⁸

Assessment for learning: coming to a shared understanding of learning goals and how to achieve them

Learning how to learn:

developing the skills and attitudes to become better learners

Pupil voice: establishing the habit of talking about learning and teaching and how to improve it

The experience of secondary schools that have already begun to personalise learning suggests a re-focusing of pastoral systems is needed, creating new roles directed towards the school's prime purpose: learning (see Box 5). In primary schools, this role is generally taken by the class teacher, who will know about most aspects of a child's learning. The aim of these changes has been to ensure that all pupils – not just the gifted and talented or those who are having difficulties – receive one-to-one attention focused on their learning.

Box 4 Engaging pupils

Reflective schools view 'pupil voice' as far more than establishing a pupil council. They are engaging pupils actively in shaping learning and teaching, for example, by:

- using pupils as learning resources for one another, helping their peers to learn and develop, within the classroom and beyond
- inviting pupils to work with teachers in curriculum teams to review schemes of work and develop plans for improving learning and teaching
- asking pupils to provide feedback on particular lessons, either through general surveys or by training them as observers of lessons
- conducting regular surveys on the quality of the school experience and how it could be improved, sharing the results with all pupils
- involving pupils in the selection process for new members of staff.

We recommend that:

 Ofsted should provide clearer guidance on the expectation that schools' self-evaluation should draw on pupils' feedback, specifically on learning and teaching. In inspection, Ofsted should consider how the school uses this evidence to develop learning and teaching.

- the role of 'learning guide' should be established in all secondary schools.²⁹ This is based on the principle that all pupils should have at least one person in school who:³⁰
 - knows them, knows what they are learning (whether in the school or beyond, for example, as part of 14-19 pathways) and understands their learning needs in the round
 - jointly agrees targets for their learning (in the context of an individual learning plan) and monitors progress across a range of indicators including the development of 'non-cognitive' skills
 - meets pupils regularly at least half-termly for an extended formal review session, although this may be more frequently for vulnerable groups
 - uses knowledge of any wider factors having an impact on their learning and draws on the resources of other specialist guidance and support in order to help them progress
 - can act as an advocate for them within the school, particularly in the design of learning and teaching experiences.
- schools should consider how best to integrate 'learning how to learn' into the curriculum – focusing on the skills and attitudes pupils need to become better learners.

We do not recommend specific models for implementing learning how to learn or the learning guide: the appropriate model will depend on the school's context. The proposals we outline in Part 3 for a strategic approach to innovation will contribute to increasing the knowledge within the education system about what works in different contexts.

Box 5 Establishing the 'learning guide' in secondary schools

In seeking to personalise learning, a number of secondary schools have found that their traditional pastoral systems were insufficiently focused on learning. In reviewing them, they have developed a role for a learning guide (an adult but not necessarily a teacher) who gets to know individual pupils over a period of time, works with them to establish and review their learning needs and monitor their progress, and is able to act as an advocate for them.

The details vary, but the consistent factor is that the role is focused on the pupil's learning and the learning guide takes a frequent, regular and lasting interest in his or her development. Where possible, the assignment of learning guide to pupil is maintained as the pupil moves through the school to ensure consistency and depth. This is particularly important for vulnerable groups of pupils, for example, children in care. In all cases, time is allocated for one-to-one work, for example, formal reviews each half term, combined with more regular face-to-face contact between the learning guide and groups of pupils.

Current school roles can be adapted or eliminated to gain capacity. For instance, some schools have supplemented form tutors with other staff with teaching, support or welfare roles. Other schools have adopted 'vertical tutoring', grouping pupils from different years together, taking advantage of the potential for peer mentoring alongside the role of the learning guide. Many schools have found that involving support staff in this kind of role has benefits for both staff and pupils. Some have also considered how matching learning guides to pupils can provide positive role models, for example, for boys or pupils from minority ethnic backgrounds. In all cases, they have taken care to ensure that the role has sufficient status and authority within the school to enable the learning guides to act effectively as advocates for their pupils.

While there are similarities between the learning guide and the role of mentors or coaches, there are some core differences. In particular, the focus of the learning guide is quite specifically on how the pupil is progressing in their learning, rather than working closely with a pupil on tackling specific issues. Many of the skills that are important for personalising learning (for example, using data to track progress and interpersonal skills for working with pupils and parents) are also important for learning guides. Schools that have introduced the role have designed their own training programmes to support them.

Schools that have taken this step have been very careful to ensure that links with more 'traditional' pupil support services are strong, so that knowledge about a pupil's learning needs is bolstered by knowledge about any wider factors that may have an impact on the pupil's learning. Some schools have adapted their welfare and inclusion teams to support this new role, providing professional expertise, for example, on information, advice and guidance, counselling, boys' attainment and family support which can be accessed by staff who carry the role of learning guide.

The responsibility for communicating directly with parents also differs, depending on the model adopted and other opportunities available for parents to engage with the school and their child's learning. Parents generally continue to have contact with specific subject teachers but expect to meet their child's learning guide to discuss overall progress and targets.

Engaging parents and carers in their children's education

While school is a central feature of the lives of the vast majority of children and young people from the age of five, it is not their first experience of learning. The skills and attitudes they need to become expert learners are shaped from birth.

Mothers and fathers are children's first teachers. There is compelling evidence that parental aspirations, expectations and involvement have a major impact on their children's attainment. Parents play a highly significant role in modelling appropriate behaviour for their children, including about literacy.³¹ None of these requires formal structures – they are shown in parents believing (and showing that they believe) in their children's ability to succeed and through what Desforges and Abouchaar have called 'at home good parenting'.³²

These factors are not evenly distributed among all parents. Rather, they are associated with family income, social class and levels of education, thereby continuing the disparity of educational experience and outcomes between different groups. However, positive parenting styles can be learnt, and breaking the cycle of disadvantage is central to the agenda for social justice which we outlined in Part 1 and within which personalising learning plays a key part.

Not all of the factors which have an impact on schools' ability to engage parents in their children's education will be susceptible to short-term measures. The government understands that engaging parents and families in school is important, and to support this has given attention to the early years, child care, pre-school education and services for maternal and child health, together with the introduction of parenting programmes. This includes piloting parent support advisers, establishing the National Academy of Parenting Practitioners,

Box 6 Involving parents and carers

Most schools have developed their own approaches to engaging parents in their children's education, providing high quality information to all and responding sensitively to local contexts and expectations. Approaches include:

- developing school-wide plans for how to engage parents across both pastoral and curriculum areas
- identifying specific days each year for consultation with parents, where tutors meet parents and pupils to discuss progress
- giving parents personal space on the school's website, where they can see information on their child's learning as well as more general information about the school
- providing mechanisms for parents to give the school their views on the quality of their child's education
- involving parent governors in reviewing the effectiveness of learning and teaching
- phoning, sending text messages or emails to parents when their children have done well
- providing information sessions at key points of transition, setting out what parents can expect from the school.

More tailored strategies for engaging particular groups of parents include:

- offering courses for parents to develop their skills, for example, in literacy, numeracy and ICT, or literacy classes focused on those learning English as an additional language
- running 'father and child' family learning programmes, focusing on previously 'hard-to-reach' families, and linking learning to activities at a local sports club.

and developing parenting services nationally following the Respect Action Plan. This work is, itself, part of broader measures directed at reducing inequalities in income, strengthening communities, tackling anti-social behaviour and improving physical and mental health. Schools' efforts must be seen within this wider context.

We focus here on what must happen so that all parents are able to help their children to take advantage of the opportunities that personalising learning presents. The response will vary, depending on a school's context and the age of the child, and may be different for mothers and fathers (see Box 6). It is important that schools take account of the way their strategies for engaging parents have an impact on different groups of pupils, according to gender, ethnicity and social class. However, there should be a common core of building trust with parents, establishing a dialogue about their children's learning, and providing information on what they can expect from school and the progress their child is making.

Beyond this universal provision, more focused engagement may be necessary, particularly for families with specific additional needs and where parents may be hostile to involvement with the school. Particular attention will be required to deal with the needs of children in care.³³ We note the intentions set out in the recently published Green Paper *Care matters* designed to give these children the necessary support to make the most of their schooling.³⁴

We recommend that:

- Schools should make information available to parents on what they can expect from schools and individual pupils' progress. This might include access to lesson plans and learning materials and should be available as and when parents want to access it. Communication should be two-way. Schools should make use of appropriate languages and media, including technology, although with care not to extend the 'digital divide'. They should provide mechanisms for parents to give feedback on the quality of education, for example through regular surveys of parental satisfaction. They should be supported by other recommendations outlined here, for example:
 - providing the results of periodic assessments for parents in an easy to understand format, such as using 'traffic lights' to indicate children's understanding of key concepts
 - discussions with the 'learning guide', or equivalent in primary schools, who would meet parents and pupils regularly to review each child's progress, discuss learning needs, ways of accessing support for those needs, and other factors relevant to their child's readiness and ability to learn.³⁵
- national and local government should strengthen links between schools and family and parenting support services as children from the most disadvantaged backgrounds enter school and move through their primary years. This should:

- focus attention on hard-to-reach families and those who may be unable to engage effectively in preparing their children for schooling or supporting their children's learning
- build the capacity of teachers and support staff to recognise barriers to learning for children and plan effective intervention, working with other services
- build the capacity of parent and family support practitioners and programmes to work with families as their children enter school
- take advantage of the co-location of Sure Start Children's Centres and other services for children, young people and families on school sites, building on Sure Start approaches and extended schools.

Designing schools for personalising learning

Central to our vision for 2020 are the changes schools make in their practices for learning and teaching. Over the next decade, the education system has a huge opportunity – in the form of the Building Schools for the Future and primary capital programmes – to design learning spaces that reflect these changes.

Headteachers, teachers, pupils and parents who have been involved in thinking through what they want their school to be like in the future have found that the task is a far more complex one than simply designing a new building. They have needed to define the learning and teaching, the relationships and the behaviours that they want to see. Using the whole school site and designing spaces that will promote new ways of working is only part of the process. Equally important is shaping a strategy for change to ensure that, by the time the new spaces are in place, all members of the school community can take advantage of them in the ways that were intended.

There is no single blueprint for a school designed for personalising learning. However, the experience of those that have made progress in this area would suggest that spaces will need to:

- be flexible enough to allow for a variety of learning and teaching approaches and greater diversity in the size and age mix of pupil groupings
- be familiar and welcoming for parents and the wider community, inviting and encouraging them into school
- emphasise participation and collaboration, through being open, safe and inviting
- support interaction, knowledge sharing and learning amongst teachers and support staff
- use technology both within and outside classrooms to enhance learning.

If society is to benefit over more than a few generations of pupils, schools and local authorities, supported by government, must take seriously their responsibility to work with architects to design schools that are flexible enough to respond to changing circumstances for many years. Few headteachers will have had the opportunity to engage in thinking so fundamentally about their school's physical environment. They will need help to look beyond short- and medium-term changes to consider what learning spaces might look like if some of the features of schooling outlined in Box 7 became common.

We have noted the intention of the National College for School Leadership (NCSL) to introduce a leadership programme to enhance headteachers' capacity to lead the design and implementation of major building projects. We believe this is an important development. In addition, local authorities have a key role in ensuring that the development of new schools meets the needs of current and future communities.

Box 7 Reconfiguring school design and organisation

Some schools are already beginning to design new learning spaces and test the implications of personalising learning for the way learning and teaching are organised. From what we see in particular areas, we can start to predict some of the ways in which schooling might look different in 2020:

- changes to the traditional school day and greater access via the internet to interactive learning opportunities, enabling 24-hour access to learning
- some 'stage not age' models of school organisation, in which children and young people are not routinely taught with others of the same age but, instead, according to their attainment
- integrated and extended organisations, which have school functions at their core but are not constrained by them, incorporating other services in a 'learning centre'
- more all-age schools, thus abolishing the need for transition between the primary and secondary phases
- school designs that deliberately do away with long corridors and hiding places, with a positive impact on behaviour
- spaces that can be used for more than one purpose, and classrooms that support a range of teaching approaches.

New technologies

Already, with significant government investment, over the past ten years the use of technology in schools has increased considerably. The new technologies have an impact on a school in three main areas:

- the administration of the school, including budgeting, planning and databases managing pupil details and progress
- the creation and delivery of lesson materials, including teachers' and pupils' use of whiteboards, visualisers, handheld voting devices and tablet PCs to enable reproduction of and access to resources
- the use of domestic digital technology as a learning tool, including home access to the internet, digital cameras, video cameras, gaming devices, Personal Digital Assistants (PDAs) and mobile phones.

Figure 4 shows some of the ways in which new technologies contribute to personalising learning by influencing what, how and why children learn.

While all schools have systems for recording and reporting information about pupils and their achievement, this information is not always readily available to those who could draw on it to improve learning, namely classroom teachers, pupils, and parents. Using the new technologies to inform learning and teaching will be a priority. This should take advantage of the potential of on-line learning opportunities linked to individual learning plans (or 'e-portfolios') and information held on pupils' progress. Technology influences what, how and why children learn by

- broadening the range of learning material children are able to access, either guided by a teacher or as part of self-directed learning
- enabling quick interactive assessments, for example, using 'voting' technology
- promoting development of a broad range of knowledge, skills and understanding, in new contexts and with virtual access to experts
- facilitating collaboration with peers (in the same school and in other schools)
- increasing the variety of learning resources, software and communication tools, through new media
- helping schools to use a wider range of readily available resources and software to enhance learning, including making software available to children to use at home
- blurring distinctions between informal and formal learning giving children the ability to choose what they learn and when they learn it
- increasing motivation, through pace and variety
- increased relevance, through greater links between children's experience of school and of the technology-rich world outside.

Supported by

Engagement with parents and pupils

expanding the potential for communication, sharing resources, creating shared spaces to record pupils' learning and progress

Whole-school systems

integrated learning and management systems that bring together all the information on pupils' progress and analysis of assessment data, and are capable of being shared with other schools and organisations It will be important that decisions on the use of the new technologies be taken in the context of a clear vision for personalising learning and be informed by comprehensive, objective advice in order to present good value for money. The British Educational Communications and Technology Agency (BECTA) has a key role in providing such advice to schools.

We recommend that:

- all local authorities should develop plans for engaging all schools in their area on how personalising learning could and should influence the way they approach capital projects (including, but not limited to, Building Schools for the Future). This is a matter of urgency for those schools taking part in the first stages of the Building Schools for the Future programme. Alongside the design of school buildings, schools will need to consider:
 - what kind of ICT investment and infrastructure will support desired new ways of working
 - how the school site and environment beyond the buildings can promote learning and pupils' engagement.
- government advice to schools and local authorities should be clearer that the standards for school building design are guidance not regulation. This would help to ensure that schools think creatively about the best use of space.
- government should set standards for software, tools and services commonly used by schools to facilitate exchange and collaboration within and between schools

 schools should consider how best resources within the school, such as the new technologies and the physical environment, could contribute to fulfilling their commitment to personalising learning. In doing so, they should consider how technology might be used to enhance pupils' access to learning resources and key software packages from home.

The proposals we set out in Part 3 for knowledge transfer, innovation, and development and research will play an important role in ensuring that schools learn from the experiences of others in designing new learning spaces.

The learning profession leading change

Designing a new school experience will involve pupils, parents, the school workforce, local and national government in altering some deeply embedded, and often unquestioned, habits and practices. For the school workforce, we think this means being confident that changes – whether to whole-school systems or to the practice of individual members of staff – are based on understanding the learning needs of their pupils in their wider context. It also means recognising that personalising learning is a journey towards excellence that engages pupils, teachers and support staff in a process of continuing adjustment and improvement: it has no defined end.

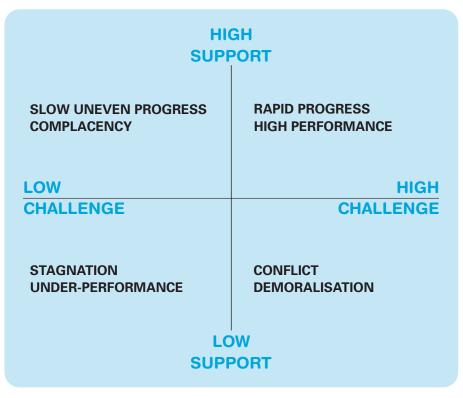
In recent years, the government has stressed the importance of high levels of professionalism among the school workforce, leading to a national workforce agreement and a programme of workforce reform.³⁶ More recently, consultation has taken place on new professional standards for teachers. A revised framework for performance management will come into practice in 2007 that recognises more fully teachers' impact on outcomes for pupils. We believe that the continued implementation of workforce reform is essential for personalising learning. Equally, it will be important to reflect personalising learning in the next phase of reform, as part of reviewing and revising standards, duties, responsibilities and rewards for teachers and support staff.

Leading change

Clearly, the leadership of each school will determine the direction and pace of change, shaping the organisation and its culture. The challenge for school leadership will remain broadly that described by Sir Michael Barber, maintaining a trajectory towards 'informed professionalism' within a context of 'high challenge, high support' (see Figure 5).³⁷

Over the next five years, the demographic profile of school leaders, and of headteachers in particular, will change considerably.³⁸ This offers a significant opportunity for the education system to consider the skills, accountability frameworks and support structures necessary for school leadership in the future, learning as appropriate from developments in leadership in other sectors (both public and private).

The forthcoming independent review of school leadership will advise on how the system should respond to this changing demographic profile and the increasingly complex nature of school leadership. At present, there is no developed understanding about the particular demands that personalising learning places on leaders. As individual schools take this forward, we will be able to draw on increasing evidence of what leadership requires in this context: for headteachers, senior and middle managers and governing bodies. A strong model for knowledge capture and for using it in professional development will be key to helping school leaders gain the necessary skills. Figure 5 – Towards high performance and rapid progress



Skills for personalising learning

Developing the school workforce must be informed by an understanding of the skills that are particularly important in personalising learning. We consider these to be:

- analysing and using data, with a specific focus on assessment for learning
- understanding how children learn and develop
- working with other adults (including parents and other children's services professionals)
- engaging pupils as active participants in learning.

Currently, all forms of initial teacher training (ITT) differ in the extent to which they recognise and teach these skills. We believe that these skills must be embedded in the learning experience for all trainees and newly qualified teachers.

ITT is fundamental to making sure that every teacher has the skills to personalise learning. However, schools have found that personalisation demands a continuing focus on developing all staff so that they are engaged consistently in renewing and extending their knowledge and skills. Extending professional development opportunities beyond the teaching staff is crucial, particularly as many of the traditional functions of teaching are now carried out by members of staff who are not qualified teachers.

The funds currently directed to CPD, not least the five days a year allocated to every teacher for this, are substantial. However, they are not always used to best effect. Some schools' definition of CPD is stretched to breaking point, using time that should be focused on improving approaches to learning and teaching to set up classrooms or attend to administration before term starts. Where schools have taken ownership of the time available to them for CPD, with a focus on professional reflection (see Box 8) the impact on pupils' learning is marked.

Box 8 Making space for professional reflection

Many schools have developed ways of building time for focused professional development into their timetables, and of creating links with other schools to enhance the experience. They have done this by:

- reconfiguring their week, for example, by timetabling an early finish for pupils once a week to provide time for professional development and teachers' collaborative lesson preparation
- agreeing common times for staff development across primary, secondary and special schools in an area which might be used for curriculum development and training, such as:
 - joint activity focused on improving transition and transfer
 - exploring a common theme such as personalising learning and assessment for learning
 - focused work, bringing together subject specialists from more than one school.

The immediate task is to find more efficient ways of deploying current resources rather than seeking new ones. The education system is developing a better understanding of the features of high quality CPD, which builds teachers' capacity for self-development.³⁹

- Much of the activity should be school-based, with a sustained focus on improving learning and teaching. This is not to say that external courses have no place, rather, that such courses are not enough in themselves to effect transfer of knowledge and skills.
- Much of the activity should be closely integrated with, and run parallel to, the daily or routine practices of teachers, since it is here where change is most difficult but also most needed. This entails sustained work with teachers in their classrooms.
- Much of the activity should involve teachers working together in small teams. This allows teachers to learn from each other and keep each other focused on the task. It also makes individual teachers accountable to their peers for effecting the changes they promise to make, making it more likely that they will do so.
- Knowledge and skills transfer is usually slow and takes time to perfect and embed. Everybody would prefer an easy quick fix, but improving learning and teaching is often slow and hard. Making small, incremental changes is more likely to result in sustainable change.

- Teachers need to be able to choose the practices they change and the techniques they use. Within areas where change will make a difference (often defined in terms of whole-school priorities), there are often a number of different approaches. Giving teachers the choice about the specific changes they make will mean they are more likely to take responsibility for them, while allowing for collective and consistent strategies to be developed school-wide.
- Teachers need to see unfamiliar new practices being used in practice. It is not enough for teachers to read or be told about effective learning and teaching. They need to see it in real classrooms for themselves and be able to question the staff and pupils. One recent development is schools' 'open days' when staff from other schools can visit to see the school at work.⁴⁰
- Teachers need to be coached and supported as they wrestle with the transfer of knowledge and skills. The potential of new technologies to support this (as well as the preceding point) is not well realised. For example, e-mentoring between teachers may be a key to better knowledge and skills transfer.

We believe that adopting a new model for CPD, based on these features, is essential for embedding assessment for learning. It could also apply to other professional practices outlined in Part 2, such as strategies for embedding learning how to learn.

The right skills, where they matter most

Developing the skills for personalising learning must be a priority for all teachers in all schools, and is essential for improving the quality of learning and teaching across a school. Doing so carries extra weight in schools facing challenging circumstances. These schools often find it difficult to recruit and retain high quality teachers, support staff and leaders, and need therefore to 'grow' their own. In addition, a strong focus on learning and development has been shown to have an impact on teachers' motivation and their commitment to a school.⁴¹

Schools can and do develop their own incentive schemes for attracting and retaining teachers. Some recognise that teachers can benefit from time in different contexts or even away from the classroom to reflect on and refresh their practice. We think more could be done to make these opportunities more widely available and to focus them on developing potential headteachers, thereby responding to the challenge of ensuring a sufficient supply of high quality school leaders in the future.

Sometimes, persistent and long-lasting difficulties in recruiting and retaining teachers and other staff result in systemic weaknesses in particular subject areas. Achieving our vision not only means developing teachers' skills for personalising learning, it also means making sure that those teachers with particular subject-specialist and other expertise are available to the schools that need them most. Here, more could be made of the ways that collaboration between schools can provide opportunities for 'sharing' capacity, benefiting all the schools involved.

Whatever the skills of its staff, no one school can ever be expected to provide all the answers to its pupils' pastoral and academic needs, partly because the system actively encourages wider opportunities and pathways within and beyond the classroom. Primary schools often draw on the expertise of subject specialists to supplement the work of the class teacher or to teach particular lessons, such as modern foreign languages. As the implementation of extended schools and 14-19 reforms continues, this will become increasingly important for all schools.

In many cases, arrangements for drawing in additional skills will be made formally with other learning organisations or services for children and young people. However, changes in demographics (both in the general population and in the cadre of school leaders) and working patterns (with more part-time and flexible working) present an opportunity to increase the pool of people and skills potentially available to schools. Engaging the skills of those who work part-time or the 'active retired' to support personalising learning would give individuals fresh opportunities to involve themselves in the life and institutions of their local community and benefit schools.

We recommend that:

- in applying the new professional standards for teachers, local and national government, agencies, schools and employers should take account of this report's recommendations on skills for personalising learning
- the Training and Development Agency for Schools (TDA) should confirm the skills for personalising learning as fundamental to initial teacher training. This would involve reviewing the guidance and the requirements for ITT providers and encouraging the schools in ITT partnerships to demonstrate and embed good practice.

- the TDA, in setting out a framework for the design of CPD, should promote the engagement of all schools in a reformed programme of CPD (focused as a priority on assessment for learning) with the following features:
 - mainly school-based with a sustained focus on improving learning and teaching
 - integrated with and running parallel to the daily practice of teachers
 - involving teachers working together in small teams.
- government should pilot a scheme offering funded professional development opportunities to high performing, experienced teachers with identified leadership potential, who commit themselves to working in schools facing challenging circumstances for a five to seven year period. The scheme could offer a term's sabbatical to outstanding practitioners, with a focus on development which further enhances their skills and leadership capabilities.⁴² A sabbatical might include:
 - working in a school other than their own
 - shadowing an executive headteacher
 - undertaking action research.
- government should publicise and support examples where small teams drawn from excellent school departments within federations, Trusts or local authorities, work in other schools within that partnership on a consultancy basis, to 'turn around' the performance of departments within schools. This would provide a means of securing good teaching for current pupils while recruiting and growing internal expertise.

 government should explore the feasibility of stimulating the market to develop a service to match schools wanting to buy in particular skills with people who have these skills to sell. This could have an initial focus on making use of the skills of the 'active retired', either those from a business background with particular expertise, for example, in human resources or finance, or recently retired headteachers, as coaches or mentors to newly appointed school leaders.

A strategy for systemic innovation

Developing a more practice-based approach to CPD is a first – and important – step in improving the transfer of knowledge between schools and teachers. It must entail a more widespread adoption of effective professional practice as well as sustained, co-ordinated action to devise and test new and better ways of working. A system-wide strategy to help the teaching profession innovate, to do things differently in order to do them better, is key to transforming pupils' learning and achievement, on which our vision is based.

Schools are increasingly autonomous, accountable for the outcomes of their pupils. While we believe this is right, unless there is a clear system-wide strategy for knowledge capture and knowledge transfer, there is a risk that the learning and effective practice developed in one school will not benefit others. Locally, schools will form partnerships and federations. Many will participate in national – and international – networks. However, sustainable change cannot take place without schools recognising knowledge transfer amongst themselves as one of their core responsibilities, nor without the support of local authorities and national agencies.

The challenge of personalisation has led some headteachers to promote a culture of innovation in their schools, supporting their staff to devise, test and implement ways of improving learning and teaching. Sometimes this has been done in partnership with researchers in higher education, sometimes with external support: from the government, especially the Innovation Unit; from agencies such as the QCA; and from other bodies, such as the Specialist Schools and Academies Trust.

Responsibility for innovation in learning and teaching is thus distributed widely among bodies with different terms of reference and remits. It is unclear who is supposed to:

- co-ordinate this work and present it to schools coherently
- capture the outcomes as valued knowledge
- ensure that it is appropriately financed
- evaluate the quality, including judging value for money
- ensure that demonstrably effective new practice is disseminated to all who might benefit
- ensure that the new knowledge and skills which are gained improve learning and teaching.

There is no obvious system for innovation in learning and teaching to direct the complex processes of knowledge creation, capture and transfer. Yet, such a system is needed to secure the widespread adoption of improved pedagogy between now and 2020.

We acknowledge that educational innovation often depends on the creativity of individuals and institutions and cannot be tightly directed and controlled by the government. We also believe that the present approach to educational innovation falls far short of what could and should be achieved over the next decade. Without government leadership now, internally driven change will not be enough to create an educational innovation system able to meet the challenges ahead. The priorities for action must be:

- to find better ways of determining priorities for development and research in learning and teaching and of constructing programmes of work to provide value for money. Effective models of partnerships between researchers and practising teachers (such as those provided by the Teaching and Learning Research Programme) need to be strengthened and increased in number.⁴³
- to establish a better balance between the contributions of professional researchers and practising teachers in shaping and participating in such programmes. Outstanding schools that are pioneering new methods of learning and teaching have insufficient funding for engaging in the knowledge creation, capture and transfer that is at the heart of innovation. The system needs to find ways of releasing teachers to undertake this work with sufficient time and focus.
- to find better methods of knowledge capture so that all parties gain ready access to the current innovation in schools, which is substantial, and likely to increase. This should deal with the fact that no single organisation is responsible for capturing knowledge and experience, with the result that most teacher-led innovation is largely hidden.
- to develop more robust means of distinguishing effective new practice from fads and fashions and of scrutinising research to identify the most worthwhile outputs. The system needs to be better at capturing knowledge about new practices in order to evaluate them objectively and comprehensively.

 to realise the potential of networks among schools and teachers to support true knowledge transfer – which is not the same as 'sharing good practice'. True knowledge transfer occurs when a practice that has been shown to be effective in one location (school or classroom) is transferred, usually with modifications, and applied in practice in another.

- the Secretary of State should commission a group, involving a majority of serving headteachers, to report by September 2007 with advice on what action needs to be taken to establish a better system of innovation in learning and teaching for pupils of school age. The group has an urgent and important task to construct an action plan that could be implemented from the financial year 2008-09.
- this group should also consider, as part of its remit, the responsibilities amongst national agencies and local government for knowledge capture and knowledge transfer. This would provide an opportunity for rationalising the activities of national agencies – or indeed, the number of agencies involved – in seeking to promote the identification and transfer of good practice.
- schools should identify areas of knowledge and successful practice that could be shared either within the school or with other schools, and make it a priority to find ways of doing so, using existing networks and partnerships where possible. The government should provide resources to enable schools to manage the demands arising from this.

PART 4

Closing the gap – a system-wide focus on achievement for all

Focusing on progress – from the earliest stages of formal schooling – and acting swiftly if children start to fall behind, is fundamental to closing the gap and to personalising learning. The proposals we outlined in Part 2 – emphasising assessment that promotes progress, helping children and young people to develop the skills and attitudes they need to be better learners, improving the way in which schools engage parents in their children's learning – are all directed to achieving this. In Part 3, we set out a strategy for ensuring that the workforce is able to rise to these challenges.

If the gaps between the average performance of different groups of pupils are to close, the government must provide strong leadership of the system over and above the measures described elsewhere in this report. Here, we focus on the two areas where we believe action is most urgent.

Ensuring a strong focus on progress for all pupils

Embedding the concept of progression in personalising learning means instilling in all children and young people the belief that they can succeed, through identifying achievable – but challenging – steps towards clear, shared goals. We outlined in Part 2 how recognising progress and success early is the key to motivation – particularly for some groups of pupils, such as boys. This, in turn, leads to greater engagement in learning and a greater chance of success.

Once pupils have fallen behind their peers they are less likely to make good progress. As certain groups of pupils are more likely to be low attaining and to make slow progress, the result is widening gaps in attainment as children and young people move through school. This leaves them increasingly at risk of being unable to access the curriculum, of losing confidence in their ability to succeed, and of disengaging, either within schools or by failing to attend altogether. Identifying those falling behind early on, through assessment for learning and tracking their progress, together with a rapid response are key if schools are to help such pupils, for example, lower attaining boys, keep up with their peers.

Currently, the government's targets place a stronger emphasis on thresholds and average attainment levels than they do on the progress of individual pupils. For example, focusing on the percentage of pupils gaining 5 A*-C at GCSE can hide marked distributions of attainment within schools, so that underachieving pupils go unnoticed and those whose achievement is already secure are not challenged sufficiently. A significant minority of children and young people do not make even one level's progress between one key stage and the next.⁴⁴

Shifting the focus towards the progress of every child would not only be in line with the central importance we attach to progression as part of personalising learning; it would also contribute to narrowing the gap between different groups of pupils.⁴⁵ Any such move would need to take account of the progression of those children and young people with special educational needs who are not currently working towards the main National Curriculum levels, for example, by recognising their progress in relation to P scales.⁴⁶

Recognising progress is no less important towards the end of compulsory schooling. However, there is currently no formal recognition of achievement for pupils who gain a pass below C at GCSE, despite the fact that these provide evidence of real progress across key stages. While the concept of 'levels' of qualification – with 5 A*-C being equivalent to a level 2 qualification – is now generally used by schools as well as colleges, schools are not required to report on the proportion of their pupils who succeed at entry level or level 1.

One of the roles of formal assessment should be to inform learners about where they are on a 'ladder' of achievement, encouraging them to want to remain in education or training in order to progress to a higher rung. The risk of disengagement if rungs of achievement are missing is high. Recognising lower levels of attainment which is vital to establishing such 'ladders' will be achieved, in part, through introducing the specialised Diplomas, which will be awarded from levels 1-3. However, we think there is scope to go further.

We recommend that:

- the government should use the opportunity of the 2007 Comprehensive Spending Review to introduce a national and school-level aspirational target for there to be no 'stuck' pupils. This should provide a focus for increasing the rate of progress between KS1 and KS2 (thereby reducing the number of children leaving primary school with below expected levels of attainment) and between KS2 and KS3.
- schools should identify all those pupils and groups of pupils not making progress in any key stage and as a result put in place progress plans designed to overcome barriers to learning
- the national qualifications framework should recognise young people's achievement of level 1 and entry level qualifications across all 14-19 learning pathways, graded as distinction, merit and pass. In such a model, GCSE passes at grades D and below would go towards a level 1 qualification.

Establishing an entitlement to personalising learning

Personalising learning must be for all. Ensuring that all children and young people are able to progress, achieve and participate requires schools to do well the things we have set out in other parts of this report. That means taking seriously their entitlement to learning, which is already expressed through the National Curriculum. As most schools recognise, securing this entitlement requires additional support for children and young people most at risk of falling behind. Focusing additional provision on low attaining pupils reduces attainment gaps, particularly when lack of progress is tackled early. Doing so is central to personalising learning.

However, personalising learning means something more. It means engaging with children, young people and their parents as respected users of the education service, giving them choices about how they access learning, listening to what they think about the service they receive and even designing those services with them. At the heart of the personalisation agenda is the belief that better outcomes will be achieved if users become participants and share a sense of collective responsibility and achievement.⁴⁷

The concept of entitlement in the context of personalising learning, particularly for children and young people at risk of not making good progress, means combining additional provision with the capacity for pupils and their parents to shape the way they access that provision. Two issues, we believe, are worth attention if the education system is serious about personalising learning.

First, not all pupils who could benefit from additional provision currently receive it. While there is already an array of measures to tackle low attainment, the range of school-level interventions falls short of guaranteeing provision to all those most in need of extra support. Resources tend to be concentrated in schools where overall attainment levels are low or overall levels of disadvantage are high. However, a significant proportion of low attaining pupils from disadvantaged backgrounds do not attend such schools. Second, the involvement of pupils and parents in deciding how they access additional provision is limited. For some groups, such as children with special educational needs or those in care, specific mechanisms already exist for arriving at a shared view of learning goals and the support needed for pupils to achieve them. Yet few formal channels exist for the majority of pupils and parents to play a role, alongside the school, in identifying learning needs and taking decisions on how these should be met.

Tackling these two issues, in our view, would strengthen significantly the attention all schools give to improving outcomes for those who are at risk of falling behind.

- the government should consider introducing an entitlement to additional support, over and above what should ordinarily be provided by the school, for pupils who are:
 - not achieving expected standards in reading, writing and mathematics during KS1
 - not progressing in English and mathematics between KS1 and KS2
 - not progressing in those subjects between KS2 and KS4.

 an essential part of this recommendation should be a pilot to give pupils and parents a resource to direct the way in which they access some of this additional support. Pupils and their parents could be offered a range of options, some provided by the school, some by other approved providers. Pupils and parents would discuss choices with the school, probably with the learning guide or equivalent. It would be the school's responsibility to report on numbers of pupils accessing support in its self-evaluation form.

PART 5 Conclusion

We believe that our proposals provide a strategic and practical approach to achieving our vision for personalising learning in 2020. They identify key areas in which we believe action now could contribute significantly to transforming the education of children and young people, leading to greater achievement and meeting the global challenges of the 21st century.

Our vision for 2020 is one in which all children and young people achieve higher standards and the gaps in average attainment between different groups of pupils are reduced. To realise this, all levels of the system must focus more strongly on the progress of *all* pupils, not just those who are close to a particular threshold. We have proposed the introduction of national and school-level targets for progression, together with an entitlement to additional provision for all pupils at risk of falling behind.

Personalising learning means taking a more structured and responsive approach to each child's learning, so that all pupils are able to progress, achieve and participate. This will be evident in high quality, challenging teaching that engages pupils and helps them to take ownership of their learning. Better assessment, whether *of* learning or *for* learning, will promote the progress of every child and young person. All children will experience an engaging curriculum that helps them to develop the knowledge, skills, understanding and attitudes they need to thrive throughout their lives. Schools, supported by other services for children, young people and families, will engage parents in their children's education. Parents will have easy access to information and, where necessary, to more targeted support. Schools will use their resources to promote the good practices and behaviours that are at the heart of personalising learning. These resources include physical resources, such as learning spaces and the new technologies, but go beyond them to include the use of time and the way schools make best use of the skills of their pupils, teachers, support staff and parents, and other members of the community.

Personalising learning requires a renewed focus on the skills of teachers and support staff, with a particular emphasis on analysing and using data, understanding how children learn and develop, working with other adults and engaging pupils as active participants in learning. It also requires the education system to improve the way that knowledge about personalising learning is captured and transferred within and between schools, to create a system for educational innovation that is better able to meet the challenges ahead.

The best schools have done much to promote understanding of what personalising learning looks like in practice, but more schools could and should do more.

We have made recommendations for action targeted at schools, but we have focused strongly on the actions we believe local government, national government and its agencies should take. This is because what they do has a profound influence on schools' motivation and capacity for change.

Taken as a whole, our recommendations for personalising learning are designed to develop a national culture for improving learning, which will lead to better outcomes for all children and young people and for the country as a whole.

PART 6 Summary of recommendations

High quality teaching

We recommend that:

 all schools should reflect a commitment to personalising learning in their learning and teaching policies and plans, indicating the particular strategies the school is exploring to fulfil that commitment for all children. As part of the self-evaluation process, schools should consider and report how effectively this commitment is being fulfilled.

Assessment that promotes progress

We recommend that:

- the government should take further action to ensure that assessment for learning is embedded in all schools and classrooms so that its benefits are fully realised
- Ofsted should report on the practices of schools that 'buck the trend' in boys' achievement
- schools should identify their own strategies for embedding assessment for learning, reporting regularly to governing bodies on their implementation and effectiveness.

Summative assessment and the National Curriculum

- the Secretary of State should commission a group, involving the QCA and Ofsted together with serving secondary and primary headteachers, to report as a matter of priority on the actions needed to ensure that the National Curriculum and its assessment develop in ways that are supportive of the vision set out in this report. The group should make recommendations by September 2007. Areas for the group's consideration should include:
 - evidence for the impact of the National Curriculum and its assessment on schools and on groups of pupils (with an emphasis on underachieving groups and the gifted and talented)
 - evidence for the use of curriculum flexibilities
 - ways in which teachers should increase their use of summative assessment for diagnostic purposes
 - addressing ways in which national assessment should be revised in response to personalising learning, for example, increasing the scope of testing 'when ready' and developing formal metrics for 'non-cognitive' skills.

 schools should consider how best to ensure that their curriculum and associated assessment support personalising learning, making use of existing curriculum flexibilities and reporting on progress to their governing body.

Pupils taking ownership of their learning

We recommend that:

- Ofsted should provide clearer guidance on the expectation that schools' self-evaluation should draw on pupils' feedback, specifically on learning and teaching. In inspection, Ofsted should consider how the school uses this evidence to develop learning and teaching.
- the role of 'learning guide' should be established in all secondary schools. This is based on the principle that all pupils should have at least one person in school who:
 - knows them, knows what they are learning (whether in the school or beyond, for example, as part of 14-19 pathways) and understands their learning needs in the round
 - jointly agrees targets for their learning (in the context of an individual learning plan) and monitors progress across a range of indicators including the development of 'non-cognitive' skills
 - meets pupils regularly at least half-termly for an extended formal review session, although this may be more frequently for vulnerable groups

- uses knowledge of any wider factors having an impact on their learning and draws on the resources of other specialist guidance and support in order to help them progress
- can act as an advocate for them within the school, particularly in the design of learning and teaching experiences.
- schools should consider how best to integrate 'learning how to learn' into the curriculum focusing on the skills and attitudes pupils need to become better learners.

Engaging parents and carers in their children's education

- Schools should make information available to parents on what they can expect from schools and individual pupils' progress. This might include access to lesson plans and learning materials and should be available as and when parents want to access it. Communication should be two-way. Schools should make use of appropriate languages and media, including technology, although with care not to extend the 'digital divide'. They should provide mechanisms for parents to give feedback on the quality of education, for example through regular surveys of parental satisfaction. They should be supported by other recommendations outlined here, for example:
 - providing the results of periodic assessments for parents in an easy to understand format, such as using 'traffic lights' to indicate children's understanding of key concepts

- discussions with the 'learning guide', or equivalent in primary schools, who would meet parents and pupils regularly to review each child's progress, discuss learning needs, ways of accessing support for those needs, and other factors relevant to their child's readiness and ability to learn.
- national and local government should strengthen links between schools and family and parenting support services as children from the most disadvantaged backgrounds enter school and move through their primary years. This should:
 - focus attention on hard-to-reach families and those who may be unable to engage effectively in preparing their children for schooling or supporting their children's learning
 - build the capacity of teachers and support staff to recognise barriers to learning for children and plan effective intervention, working with other services
 - build the capacity of parent and family support practitioners and programmes to work with families as their children enter school
 - take advantage of the co-location of Sure Start Children's Centres and other services for children, young people and families on school sites, building on Sure Start approaches and extended schools.

Designing schools for personalising learning

- all local authorities should develop plans for engaging all schools in their area on how personalising learning could and should influence the way they approach capital projects (including, but not limited to, Building Schools for the Future). This is a matter of urgency for those schools taking part in the first stages of the Building Schools for the Future programme. Alongside the design of school buildings, schools will need to consider:
 - what kind of ICT investment and infrastructure will support desired new ways of working
 - how the school site and environment beyond the buildings can promote learning and pupils' engagement.
- government advice to schools and local authorities should be clearer that the standards for school building design are guidance not regulation. This would help to ensure that schools think creatively about the best use of space.
- government should set standards for software, tools and services commonly used by schools to facilitate exchange and collaboration within and between schools
- schools should consider how best resources within the school, such as the new technologies and the physical environment, could contribute to fulfilling their commitment to personalising learning. In doing so, they should consider how technology might be used to enhance pupils' access to learning resources and key software packages from home.

Skills for personalising learning

- in applying the new professional standards for teachers, local and national government, agencies, schools and employers should take account of this report's recommendations on skills for personalising learning
- the Training and Development Agency for Schools (TDA) should confirm the skills for personalising learning as fundamental to initial teacher training. This would involve reviewing the guidance and the requirements for ITT providers and encouraging the schools in ITT partnerships to demonstrate and embed good practice.
- the TDA, in setting out a framework for the design of CPD, should promote the engagement of all schools in a reformed programme of CPD (focused as a priority on assessment for learning) with the following features:
 - mainly school-based with a sustained focus on improving learning and teaching
 - integrated with and running parallel to the daily practice of teachers
 - involving teachers working together in small teams.

- government should pilot a scheme offering funded professional development opportunities to high performing, experienced teachers with identified leadership potential, who commit themselves to working in schools facing challenging circumstances for a five to seven year period. The scheme could offer a term's sabbatical to outstanding practitioners, with a focus on development which further enhances their skills and leadership capabilities. A sabbatical might include:
- working in a school other than their own
- shadowing an executive headteacher
- undertaking action research.
- government should publicise and support examples where small teams drawn from excellent school departments within federations, Trusts or local authorities, work in other schools within that partnership on a consultancy basis, to 'turn around' the performance of departments within schools. This would provide a means of securing good teaching for current pupils while recruiting and growing internal expertise.
- government should explore the feasibility of stimulating the market to develop a service to match schools wanting to buy in particular skills with people who have these skills to sell. This could have an initial focus on making use of the skills of the 'active retired', either those from a business background with particular expertise, for example, in human resources or finance, or recently retired headteachers, as coaches or mentors to newly appointed school leaders.

A strategy for systemic innovation

We recommend that:

- the Secretary of State should commission a group, involving a majority of serving headteachers, to report by September 2007 with advice on what action needs to be taken to establish a better system of innovation in learning and teaching for pupils of school age. The group has an urgent and important task to construct an action plan that could be implemented from the financial year 2008-09.
- this group should also consider, as part of its remit, the responsibilities amongst national agencies and local government for knowledge capture and knowledge transfer. This would provide an opportunity for rationalising the activities of national agencies – or indeed, the number of agencies involved – in seeking to promote the identification and transfer of good practice.
- schools should identify areas of knowledge and successful practice that could be shared either within the school or with other schools, and make it a priority to find ways of doing so, using existing networks and partnerships where possible. The government should provide resources to enable schools to manage the demands arising from this.

Ensuring a strong focus on progress for all pupils

- the government should use the opportunity of the 2007 Comprehensive Spending Review to introduce a national and school-level aspirational target for there to be no 'stuck' pupils. This should provide a focus for increasing the rate of progress between KS1 and KS2 (thereby reducing the number of children leaving primary school with below expected levels of attainment) and between KS2 and KS3.
- schools should identify all those pupils and groups of pupils not making progress in any key stage and as a result put in place progress plans designed to overcome barriers to learning
- the national qualifications framework should recognise young people's achievement of level 1 and entry level qualifications across all 14-19 learning pathways, graded as distinction, merit and pass. In such a model, GCSE passes at grades D and below would go towards a level 1 qualification.

Establishing an entitlement to personalising learning

- the government should consider introducing an entitlement to additional support, over and above what should ordinarily be provided by the school, for pupils who are:
 - not achieving expected standards in reading, writing and mathematics during KS1
 - not progressing in English and mathematics between KS1 and KS2
 - not progressing in those subjects between KS2 and KS4.
- an essential part of this recommendation should be a pilot to give pupils and parents a resource to direct the way in which they access some of this additional support. Pupils and their parents could be offered a range of options, some provided by the school, some by other approved providers. Pupils and parents would discuss choices with the school, probably with the learning guide or equivalent. It would be the school's responsibility to report on numbers of pupils accessing support in its self-evaluation form.

Endnotes

- 1 Throughout this report we refer to parents. We intend this to include carers and those who look after children and young people from their immediate, wider or extended family, as well as those caring for children and young people in local authority care
- 2 Throughout this report we refer to children and young people in school as pupils. This is not intended to suggest a particular age range.
- 3 Bransford J.D., Brown A. L. and Cocking R. (eds.), *How people learn: brain, mind, experience and school*, National Academy Press, Washington DC, 2000.
- 4 National Curriculum Assessments at Key Stage 2 in England, 2006 (Revised) (SFR46/2006), DfES, 2006. Available at: www.dfes.gov.uk/rsgateway/DB/SFR/s000697/SFR48-2006.pdf
- 5 Participation in Education, Training and Employment by 16-18 Year Olds in England: 2004 and 2005 (SFR21/2006), DfES, 2006. Available at: www.dfes.gov.uk/rsgateway/DB/SFR/s000587/SFR27-2005.pdf
- 6 The following groups of pupils are more likely to be in the lowest attaining quartile: boys, pupils from disadvantaged backgrounds, pupils from certain minority ethnic groups, pupils with a special educational need, children in care and pupils who have changed school at some time during their school career. *Statistics of education: the characteristics of low attaining pupils* (BO2/2005), DfES, 2005. Available at: www.dfes.gov.uk/rsgateway/DB/SBU/b000588/b02-2005.pdf
- 7 Social mobility: narrowing social class educational attainment gaps: Supporting materials to a speech by the Rt Hon Ruth Kelly MP, Secretary of State for Education and Skills to the Institute for Public Policy Research, 26 April 2006. Available at www.dfes.gov.uk/rsgateway/DB/STA/t000657/index.shtml
- 8 Progress in International Reading and Literacy Study (PIRLS) 2001 report is available at www.teachernet.gov.uk/docbank/index.cfm?id=3980
- 9 Annex B lists some of the key sources for this part of the report.
- 10 Meece J., Glienke G. and Burg S., 'Gender and Motivation' in *Journal of School Psychology* 44, pp351-373, 2006.
- 11 Margo J., Dixon M. with Pearce N. and Reed H., *Freedom's orphans: raising youth in a changing world* (ISBN 186030303x), Institute for Public Policy Research (ippr), 2006.
- 12 Those who come from disadvantaged backgrounds come from a less orderly and secure local environment and have parents who are less engaged.

- 13 MORI survey of 11 16 year olds, quoted in Greany T. and Rodd J., *Creating a learning to learn school*, NEP, 2004.
- 14 Boys' achievement in secondary schools (HMI 1659), Ofsted, 2003.
- 15 Higher order thinking skills include analysing, synthesising and evaluating.
- 16 Ellis E.S., Worthington L. A. and Larkin M.J., Research synthesis on effective teaching principles and the design of quality tools for educators. Technical report No. 5 for the National Center to Improve the Tools of Educators, University of Oregon, 1994; McKinstery J., and Topping K. J., 'Cross-age peer tutoring of thinking skills in the high school', *Educational Psychology in Practice*, 19 (3), pp199-217, 2003.
- 17 MacBeath J., Kirwan T., et al. *The impact of study support: a study into the effects of out-of-school-hours learning on the academic attainment, attitudes and attendance of secondary school pupils*, Research Brief 273, DfES, June 2001. This showed that study support was of disproportionate benefit to pupils from disadvantaged backgrounds and minority ethnic pupils.
- 18 The group chaired by Sir Alan Steer to examine behaviour in schools confirmed the link between high quality teaching and good learning behaviours: *Learning Behaviour: the report of the practitioners' group on school behaviour and discipline* (Ref: 1950-2005DOC-EN), DfES, 2005.
- 18 The Early Years Foundation Stage will be introduced in 2007 and specifies six areas of development: personal, social and emotional development; communication, language and literacy; problem solving, reasoning and numeracy; knowledge and understanding of the world; physical development; creative development.
- 20 The gender gap in England was 25 percentage points, the fifth lowest of all OECD countries.
- 21 Rose J., *Independent review of the teaching of early reading: final report* (ISBN 1-84478-684-6), DfES, 2006.
- 22 Black P. and Wiliam D., *Inside the black box: raising standards through classroom assessment*, NFER-Nelson, 1998. Black P., Harrison C., Lee C., Marshall B. and Wiliam D., *Working inside the black box: assessment for learning in the classroom*. NFER-Nelson, 2002.
- 23 Nearly three-quarters of secondary schools in England record assessment for learning as their key whole-school priority.

- 24 The annual report of Her Majesty's Chief Inspector of Schools 2005/06, (HC 1956), Ofsted, 2006.
- 25 See Wiliam D., 'Assessment for learning: why, what and how', in *Excellence in assessment: assessment for learning* (a supplement to the Cambridge Assessment network assessment for learning seminar, held on 15 September 2006).
- 26 Eppi Centre Review: A systematic review of what pupils, aged 11-16, believe impacts on their motivation to learn in the classroom, 2005. Available at: http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=304
- 27 PIRLS 2001 report is available at: www.teachernet.gov.uk/docbank/index.cfm?id=3980
- 28 Alexander R., Towards dialogic teaching, Dialogos, 2006.
- 28 We see the 'learning guide' as a distinctive role for secondary schools. Primary schools will want to consider how the functions of the role can be combined with the role of class teacher and those of other members of the school staff. In neither case do we think this means establishing new posts.
- 30 Where possible, there should be continuity so that the learning guide remains a stable presence throughout the pupil's time at the school: this is particularly important for vulnerable groups such as children in care.
- 31 Clark C. and Foster A., *Children's and young people's reading habits and preferences: The who, what, why and when*, National Literacy Trust, 2005.
- 32 Desforges C. with Abouchaar A., *The impact of parental involvement, parental support and family education on pupil achievement and adjustment: a review of literature* (Research Report 433; ISBN 1 841859990), DfES, 2003.
- 33 We use this term to refer both to children formally in the care of the local authority and those who may be cared for through other, more informal, arrangements.
- 34 Care matters: transforming the lives of children and young people in care (Ref. DFES-03978), DfES, 2006.
- 35 The White Paper, *higher standards, better schools for all*, set out proposals to require schools to report to parents three times a year.
- 36 Workforce reform aims to: remove tasks from teachers that do not require their professional skills and expertise; reduce working hours; and build capacity so that teachers can focus on their core role and enhance their professional status. It has led to an enhanced role for support staff, with a framework of standards and qualifications to assist their career development, progression for support staff and teaching assistants, and a skills strategy for the wider school workforce.
- 37 Barber M., *High expectations and standards for all, no matter what: the leadership challenge for a world-class education service,* NCSL, 2000.
- 38 Over 60% of headteachers and 40% of assistant and deputy headteachers were over 50 in March 2005. The NCSL estimates that retirement pressures will require an increase, on 2004 figures, of 15-20% in recruiting school leaders by 2009.

- 39 *The logical chain: continuing professional development in effective schools* (HMI 2639), Ofsted, 2006.
- 40 Teachers' TV also enables teachers to see examples of a wide range of practices.
- 41 Bush A., *Choice and equity in teacher supply* (ISBN: 1860302726), Institute for Public Policy Research, 2006.
- 42 Practitioners would return to their schools following the sabbatical.
- 43 The Teaching and Learning Research Programme is managed by the Economic and Social Research Council to enhance outcomes for learners in all educational sectors across the UK.
- 44 In 2005, 13% of pupils eligible for free school meals and 10% of pupils not eligible for free school meals were either 'stuck' or regressed between Key Stage 2 and Key Stage 3 (DfES analysis).
- 45 If, for example, all pupils made at least one level's progress between Key Stage 2 and Key Stage 3, the social class attainment gap would be reduced by nearly five percentage points in English and mathematics, and the gender gap in English by 3.5 percentage points.
- 46 P scales are performance criteria that set out attainment for pupils working below level 1 of the National Curriculum and are particularly relevant for those with learning difficulties. They are teacher assessed on a 1-8 scale.
- 47 Leadbeater C., *Personalisation through participation: a new script for public services*, Demos, 2005.
- 48 Speech to the North of England Conference, 6 January 2005.

ANNEX A Terms of reference

Objectives

To present to the Secretary of State a vision for personalised teaching and learning in 2020 which enables every child to achieve higher standards; and to make recommendations which would support delivery of that vision.

Context

The Secretary of State has set as a top priority the achievement of a fully personalised education system.

"Parents want their children's individual needs to be recognised, understood and responded to – 'personalisation'. Every parent knows that all children are unique with different talents, different strengths and different weaknesses. That some children need extra help, support and encouragement to get the basics right, but that others need greater stretch and challenge to make the most of their potential.

So, we need to meet the needs of every individual child and find different ways of supporting, developing and raising the aspirations of all children. This is what good teachers and good schools have always done – asked themselves the question "how do I help each and every child in my class achieve their potential?".... I shall be carefully examining how we make this a reality and deliver to schools the appropriate incentives to realise each child and young person's potential."⁴⁸

The review will advise the Secretary of State on how we achieve that vision.

The Schools White Paper Higher Standards, Better Schools for All set out plans for personalised learning, backed by additional resources, to improve achievement in the basics of literacy and numeracy and to help meet the potential of gifted and talented pupils. The 14-19 Education and Skills White Paper launched a 10 year reform programme for the education system for young people to improve standards. Workforce reform, delivered through the social partnership, has provided the time and opportunity to put personalised learning and teaching at the centre of school reform. These reforms were themselves informed by the National Conversation about Personalised Learning which identified best practice already to be found in schools and local communities. The review will look beyond these reforms to the classroom of 2020 exploring how the current reform programme can be maintained and strengthened.

Scope

In order to present a comprehensive vision for the compulsory education system the review should make recommendations which address the following areas.

- What teaching and learning strategies and classroom practice best ensure personalised learning, to raise standards across the board and especially in literacy and numeracy, and how that good practice is best spread through the education system.
- How personalised learning can best raise the achievement of children from groups which have historically underachieved, with a view to closing the attainment gap and boosting social mobility. Particular consideration will be given to how personalised learning can boost the performance of those from underperforming minority ethnic groups; with special education needs and disabilities in mainstream schools; from less advantaged socio-economic backgrounds; and looked after children. The review will also look at gender imbalances.
- Appropriate forms of within school organisation including the use of setting and grouping.
- How personalised approaches such as the use of Gifted and Talented programmes can best be used to promote educational excellence.
- How parental engagement in children's education will best support personalised learning, particularly among those parents without a history of involvement in schools.
- The implications of the delivery of personalised learning for school building design, and how the use of ICT should best be exploited for personalised learning.
- How workforce reform, and in particular the recruitment and deployment of teachers and other teaching and support staff in

schools and other settings should better secure personalised learning, including the implications for initial and continuing professional development. The recommendations will not address questions of pay and conditions of the workforce but will consider incentives to improve teaching and learning.

- How schools can best make use of the flexibilities in the National Curriculum in order to ensure personalised learning and lead to higher standards. The recommendations will not change the direction of the existing programme of curriculum and qualifications change set out in the 14-19 White Paper, including curriculum reform at Key Stage 3 and the system of qualifications based on GCSEs, A levels and new specialised Diplomas, but will take as their starting assumption the effective implementation of that programme.
- How collaboration between schools and other providers, including children's services and the use of extended schools, can improve personalised learning opportunities.
 Recommendations should include how schools should extend opportunities for learning and development outside the classroom particularly for those pupils whose opportunities would otherwise be limited by family circumstances.
- How the current assessment and accountability regime for schools should be built upon so that it better recognises the progress of all children and young people and provides further incentives for schools to ensure that all children achieve higher standards. Recommendations will be based upon the continuing role of National Curriculum assessment at the end of KS1, KS2 and KS3, including National Curriculum tests in core subjects at the end of KS2 and KS3.
- How the use of data on pupil and school performance and progress can best improve teaching and learning to secure higher standards.

ANNEX B

Sources analysing trends and future predictions for 2020

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ANNEX C

Teaching and learning in 2020 review group

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