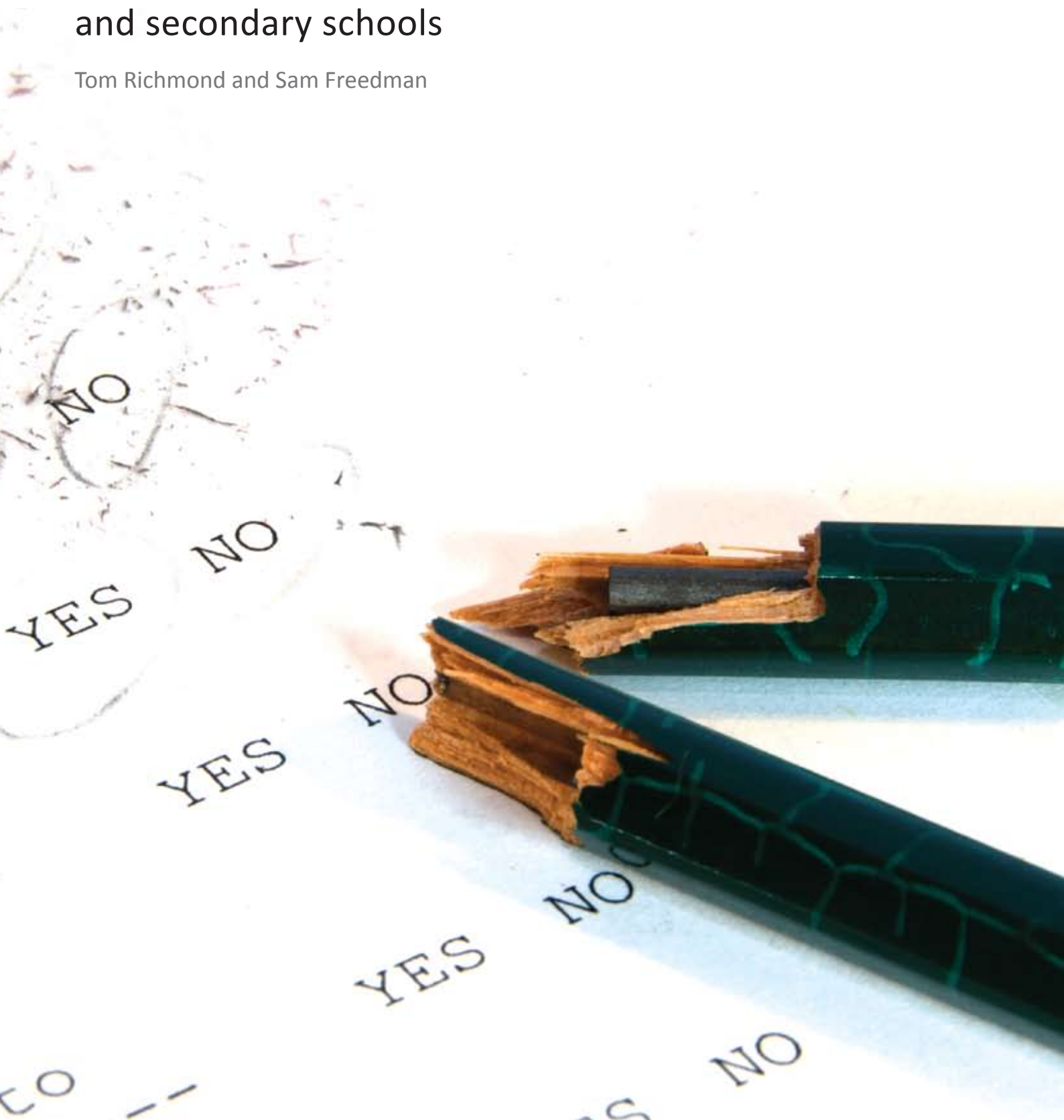


Rising Marks, Falling Standards



An investigation into literacy,
numeracy and science in primary
and secondary schools

Tom Richmond and Sam Freedman



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Executive summary

This report is split into two halves, the first looking at the delivery and assessment of literacy and numeracy in primary schools, and the second concentrating on literacy and numeracy at secondary level as well as discussing post-14 qualification routes. The aim of the report is to give an overview of the current Government's key reforms to improve key skills and employability, analyse the impact that these reforms have had and offer recommendations on how the system can be improved.

Primary section

Chapter 1: The Primary National Strategy

- The Primary Literacy Strategy was introduced in 1998 and the Primary Numeracy Strategy in 1999 by the new Labour Government as a way to boost attainment in English and maths through prescribing certain content that all schools should teach (though the Strategies were never statutory). In 2003, these two separate initiatives were replaced by a single Primary National Strategy.
- Over £2 billion has been spent on these strategies to date. Most of this has been spent on local authority advisors who are supposed to help schools deliver the strategy and on a central contact to a main provider (currently Capita) who support this delivery.
- The effect of the strategies on pupil achievement has been minimal. The results of Key Stage 2 SATs, taken at the end of primary school, were going up sharply before the strategies were introduced as teachers learnt how to prepare students for the recently introduced national tests at the same time as pass marks were falling. After the strategies were introduced, progress was far slower and has ground to a halt in recent years, despite further reductions in pass marks.
- We argue that this is because centralised programmes will always stifle innovation in schools and crowd out new ideas in the marketplace. For example, regardless of the overwhelming evidence, it took ten years of pressure before synthetic phonics was recognised by the National Literacy Strategy as the best way to teach reading.

Chapter 2: Extra support programmes

- The Government's failure to meet their literacy and numeracy targets using the National Strategies has meant the introduction in the past few years of new programmes designed to help those struggling to gain basic skills. The two most prominent are 'Making Good Progress', which is supposed to offer one-to-one tuition for 10% of children in Key Stage 2 and 3 classes from next year,

and the 'Every Child' programmes including Every Child a Reader (which has been running in one form or another since 2005) and Every Child Counts, designed to provide intensive support for struggling Key Stage 1 pupils.

- The Making Good Progress pilot has revealed serious problems with the programme. Just 3% of children have had access to tuition (well below the Government's target of 10%) as schools have had trouble recruiting tutors. 60% of the tuition has come from existing staff, adding to their workloads, and there has been no evaluation of the impact of tuition on results. Around £120 million is due to be spent on the programme annually from next year.
- The 'Every Child' programmes will receive £169 million of Government funding by 2011. They are extremely expensive interventions because they require specially trained staff and up to 50 hours of one-to-one tuition for each child. Only Every Child a Reader has a track record (though a controversial one) because it is based on Reading Recovery, a system developed in New Zealand in the 1970s which is now used in a number of countries. There are, though, no independent UK evaluations that suggest Reading Recovery works better than cheaper alternatives (although it does improve literacy outcomes). 'Every Child Counts' and 'Every Child a Writer' were not even developed when the Government decided to support them. By 'backing winners' in the absence of supporting evidence, the Government has crowded out the development of alternative interventions.
- We argue that there are numerous holistic literacy programmes on the market (and some numeracy ones) that cover all levels of ability. As these alternative programmes can be more effective in raising achievement than the National Strategies, fewer children need extra support when they are implemented, making them cheaper overall. By forcing schools through the current system, the Government have created an unnecessarily complex and costly process for delivering basic skills that still isn't working.

CHAPTER 3: Primary assessment and testing

- National tests at the end of primary school are one of the most contentious issues in education at the moment. There is a widespread belief that the importance given to these tests is distorting the behaviour of schools, leading them to 'teach to the test' and concentrate on those children just below the minimum standard rather than supporting all children regardless of their ability.
- The marking fiasco of 2008, when a new contractor, ETS, failed to deliver results on time, has made this problem even more pressing. Unfortunately, the potential alternative to SATs that the Government have been piloting over the past few years – 'single-level tests' – could be even worse. These tests rely on teachers judging when a child reaches each level and the pilots suggest this does not work well, with many of the pupils judged to be working comfortably at each level failing the tests. Moreover, there are numerous technical problems with the tests that have yet to be resolved.

Chapter 4: Primary recommendations

1. **Phase out the Primary National Strategy:** As we argue in Chapter 1, this has proved extremely expensive and has had little impact on attainment.

2. **Introduce a ‘What Works Clearinghouse’ maintained by a new Standards Agency (replacing OFQUAL) and incentivise schools to use programmes that work through funding:** We would take the funding currently spent on the Primary National Strategy, Making Good Progress and the ‘Every Child’ programmes and use it as an incentive for schools to choose from a range of literacy and numeracy programmes that are proven to work. A new Standards Agency would commission research into different interventions and a collection of the best programmes on the basis of research evidence – similar to the ‘What Works Clearinghouse’ funded by the U.S. Government – would offer guidance to schools on which programmes work for teaching literacy and numeracy. No primary school would have to use approved programmes but if they did they would receive an additional £20,000 each (assuming that every primary school participated for both literacy and numeracy).
3. **Scrap ‘single-level tests’ and look to regular adaptive online testing as a long-term alternative to Key Stage 2 tests:** While we agree that there are genuine problems with Key Stage 2 SATs we think scrapping them without putting an alternative in place would be an unacceptable reduction of accountability. Likewise we think that the Government’s ‘single-level tests’ would lead to another fiasco if they were introduced. Our preferred alternative would be to explore the potential of ‘adaptive’ online testing that could be used frequently for formative purposes to help teachers structure teaching and grouping, as the tests would ‘adapt’ to each child’s ability. These frequent tests could be used to generate a summative measure for accountability purposes, but this could be based on the progress made over time as children would be tested regularly.
4. **Introduce sampling as a new measure of national standards:** We do not think SATs are an appropriate way to measure standards over time, and neither are single-level tests or adaptive testing. We argue that our proposed Standards Agency should set up a national sampling programme to offer definitive answers on this question.

Secondary section

Chapter 5: Key Stage 3 – The Secondary National Strategy and assessment

- The Secondary National Strategy was introduced in 2003 following the perceived (albeit illusory) success of the Primary Strategy. As with the Primary Strategy, it has had little impact on attainment, with most of the recent improvement in Key Stage 3 SATs results happening before they were introduced. Again, most of the money – roughly £100 million a year – is spent on consultants and delivery contracts rather than in schools. Notably the number of high-achievers in Key Stage 3 SATs has fallen over the last few years.
- Key Stage 3 assessment for 14-year-olds was scrapped in 2008 after the new school year had started in a panicked response to the ETS marking fiasco in the summer. While these tests were not working well, their sudden removal has left a vacuum and most schools have continued to use the tests voluntarily in one form or another. There is a real need to replace them with something more useful that can act as a gateway between Key Stage 3 and post-14 routes.

Chapter 6: GCSEs

- The academic integrity of GCSEs has been in question since they were launched in 1988. As early as 1994, the A* grade had to be introduced as results were improving so dramatically and they have continued to do so ever since. There has been particular controversy over the past few years about the acknowledgement of GCSE equivalents, like the GNVQ ICT (worth four GCSEs until it was scrapped in 2007) in government statistics. The Government implicitly recognised this a few years ago when it introduced a new standard measure of GCSE attainment: five A*-C grades including English and Maths GCSE. On this measure, fewer than half of 16-year-olds meet the standard and just a quarter of all pupils achieve 5 A*-C grades including English, Maths, a science and a Modern Foreign Language.
- We are concerned that the Government have reacted to the continued low attainment in core subjects by weakening the content of qualifications. The new science GCSEs introduced in 2007 are a case in point, replacing an understanding of key methodologies with a focus on “scientific literacy” (i.e. broadly scientific issues like healthy eating and the environment). This new curriculum has been widely criticised by the scientific community. The same now appears to be happening with Maths GCSEs.

Chapter 7: Diplomas

- Diplomas were introduced as an alternative post-14 qualification in September 2008. They were originally mooted by Mike Tomlinson in his 2005 report following the A-level marking scandal in 2002. However, Tomlinson saw them as a single qualification that would replace all existing ones, whereas the Government’s version sits alongside existing qualifications. The Government have also been extremely unfocused in targeting their Diplomas, having claimed that they can simultaneously train students for the workplace and for university as well as being appropriate for pupils of all abilities and learning styles. This scattergun approach ultimately risks missing all of these objectives.
- In addition, the Diplomas are astonishingly complicated. One expert called them “the most complicated qualification I have ever seen”. There are 119 different subject and level combinations and up to 80 further specialisms within each of these 119 options. This complexity, combined with the lack of focus, goes some way to explaining why just 11,500 students took up a Diploma when they were launched, rather than the 50,000 anticipated. This was despite an initial £300 million investment in Diplomas over three years.
- There remains a multitude of technical and logistical problems that have yet to be resolved, even though the first Diplomas have already been launched. These include complications over grading – the exam boards don’t even think they can be accurately graded – and with transport, as most Diploma students have to move between different sites.

Chapter 8: Young Apprenticeships

- Ironically one of this Government’s most successful programmes – Young Apprenticeships – that was introduced in 2004 has been widely ignored. Only

9,000 students took the qualification in 2008, despite considerable praise from Ofsted in the only evaluation to date. The programme allows 14-year-olds who do not wish to pursue purely academic study to spend two days a week in a workplace learning vocational skills (in contrast to the Diploma which allows for just ten days work experience over two years).

- This small programme is at risk from a number of factors. It is funded by the Learning and Skills Council which is due to be abolished in 2010 and the Government seem increasingly keen to wrap it into the Diploma programme, which could dilute the quality of workplace training. Moreover, the programme is currently restricted to young people who have scored highly on Key Stage 3 tests. This is counter-productive, seeing as many of the students who would find this route most valuable have already become alienated from education by the time they reach 14.

Chapter 9: Secondary recommendations

1. **The Secondary National Strategy should be scrapped and schools should be given extra resources and time to focus on children still struggling with literacy and numeracy:** Scrapping the Secondary National Strategy would save around £100 million a year that could be allocated by our proposed Standards Agency to schools that use proven literacy and numeracy interventions on the basis of the number of pupils entering secondary school with difficulties in these subjects. All secondary schools should have academy-style freedom over the Key Stage 3 curriculum so that they can focus, for those children still struggling, on core skills.
2. **Develop a new profile for children completing Key Stage 3 which would help them to decide which post-14 pathway to follow:** Now that the Key Stage 3 SATs have been scrapped we recommend putting a 'Pupil Profile' in their place that would bring together attainment, information on key skills, teacher assessments of other skills such as team-work and a statement of the pupil's interests. This could then be used to offer pupils and their parents a genuine choice between three clear post-14 routes: GCSEs, a simplified Diploma or a Young Apprenticeship.
3. **Create three distinct routes from 14 to 16:** we believe that reforms of all three of these routes are needed to provide a clear choice to 14 year olds.
 - (a) GCSEs should be strengthened and the recent trend towards 'literacy' and 'functionality' rather than genuine understanding should be reversed. Many of the GCSE equivalents should be scrapped as the Diploma programme should provide an 'Applied' alternative and Young Apprenticeships provide a 'Vocational' alternative.
 - (b) The Diploma programme should be radically simplified. The number of levels should be cut from four to two, and the degree of specialisation should be significantly reduced. The unworkable grading system should be replaced with a straightforward Distinction/Pass/Fail model and the work experience component should be enhanced.
 - (c) The Young Apprenticeship programme should be significantly expanded to offer a proper vocational route to all 14-year-olds. The entry criteria should be lowered to make the scheme accessible to many of the students who need it the most.

4. **Rationalise subjects so they sit in the most appropriate route:** as a corollary to the reforms listed above, the entire post-14 qualifications framework should be rationalised so that subjects, where appropriate, only sit in one route. This would mean, for example, scrapping Vocational GCSEs that are essentially replicated by the Diplomas.

Introduction

When we began to develop our Skills Programme at Policy Exchange, we originally intended to focus entirely on work-based learning and adult skills. However, it quickly became apparent to us that one of the biggest problems in this area is the ability of school leavers, many of whom have not mastered basic skills, to handle work-based training. As Lord Leitch put it in his influential, if deeply flawed, report on adult skills, “ensuring that everyone leaving school has the basic literacy and numeracy skills they will need in life is critical”.

While employers have been complaining about the quality of school-leavers for at least 150 years, the problem has become ever-more pressing as the number of jobs available to entirely unskilled workers diminishes. Moreover, we only really got a sense of the scale of the problem when national testing was introduced into schools for 7, 11 and 14-year-olds in the early 1990s. These tests revealed for the first time just how few children were mastering the basic skills of literacy and numeracy. In 1995, for example, fewer than 50% of primary school leavers were reaching the minimum standard for English or maths. The issue quickly rose to the top of the political agenda and, while still in opposition, the Labour Party developed literacy and numeracy ‘strategies’ for primary schools as their solution to this problem.

A consensus has developed in recent years that, despite their expense and the extra burdens they have placed on schools, these strategies were initially a big success with results plateauing out later. We show, in the first chapter of this report, that this simply isn’t true. Results were going up quickly *before* the strategies were introduced – probably through a combination of lower standards and teachers becoming acclimatised to tests. They improved far more slowly after the introduction of these strategies, despite the Government investing £2 billion in them. Moreover, pass marks continue to drop, raising questions over whether there has been any improvement at all in the past fifteen years. Even with lower pass marks, easier tests, widespread teaching to the test and billions of pounds spent on advisors and consultants, only 56% of the boys and 66% of the girls who left primary school in 2008 could read, write and count to the current minimum standard.¹

This suggests that trying to prescribe how schools should teach literacy and numeracy from the centre has not worked. Not only does it frustrate teachers, stifling their ability to innovate, but it also crowds out the development of alternative solutions. That it took ten years for synthetic phonics to be recognised in the National Literacy Strategy as the best way to teach reading is a tribute to the bureaucratic inertia that massive centralised processes tend to create. Nevertheless, as we show in Chapter 2, the Government have made the same mistake in their support

“ Only 56% of the boys and 66% of the girls who left primary school in 2008 could read, write and count to the current minimum standard ”

1 Measured by the number of pupils achieving Level 4 in reading, writing and mathematics

for a number of interventions for those pupils who are falling behind in literacy and numeracy, particularly ‘Making Good Progress’ tuition and the ‘Every Child’ programmes. Again, they have chosen winners and funded specific programmes, neither of which have a proven track record, rather than giving schools a choice.

In our primary recommendations (Chapter 4) we suggest a new approach that would combine freedom for schools with strong guidance linked to financial incentives. This would involve developing something similar to the ‘What Works Clearinghouse’ (developed by the US Department of Education) under the aegis of a new Standards Agency, which would commission research into literacy and numeracy interventions developed by companies and charities. Schools would receive a financial incentive to take up any intervention that proved itself through this process, though they would not have to participate. Bundling together all the money currently being spent on the literacy and numeracy strategies, ‘Making Good Progress’ and the ‘Every Child’ programmes would mean that if every primary school participated they could each receive over £20,000 extra each year. The same would apply to the Secondary National Strategy, which has all the flaws of its primary counterpart (discussed in Chapter 5).

Alongside the National Strategies, the Government’s other main strategy to drive up standards has been to increase the importance of assessment and develop new qualifications. At the primary level this has meant putting ever more importance on Key Stage 2 SATs, to the point where they are now seriously distorting practice. In Chapter 3 we explore some of the problems caused by the focus on SATs including ‘borderlining’ – the practice of focusing all resources at those students who are just below the minimum standard expected, but who could be pushed over the line in time to benefit the schools statistics, at the expense of both students who are struggling and those who are brighter and need to be stretched. We also show how the Government’s proposed alternative – so-called ‘single-level tests’ – that are currently being piloted would be actually be far worse than SATs. In our primary recommendations (Chapter 4) we offer our alternative: ‘adaptive testing’ that would serve both a formative and summative purpose plus the introduction of national sampling.

At the secondary level, tests for 14-year-olds have been hurriedly scrapped following the marking fiasco of summer 2008, but nothing has been put in their place, leaving a vacuum. In our secondary-level recommendations (Chapter 9) we argue that a ‘pupil profile’ should be introduced for 14-year-olds combining data on attainment in core skills, teacher assessment, careers’ guidance and the interests of the child. This would help teachers, parents and pupils make decisions about the most appropriate post-14 route to take.

At the moment there is real confusion about these post-14 routes, something that has been exacerbated by the muddled introduction of the new ‘Diplomas’ in September 2008. In Chapter 7 we explain the history behind this new qualification and why the response from the sector, and from students, has been so weak. Essentially the Government is trying to get these new qualifications to do too many things. They are supposed to prepare students for work while also preparing them for university, and provide stretch for the brightest pupils while being accessible to those who are not able to manage GCSEs and A-levels. Moreover, the sheer complexity of the qualifications is overwhelming; there are almost 120 different combinations of Diplomas.

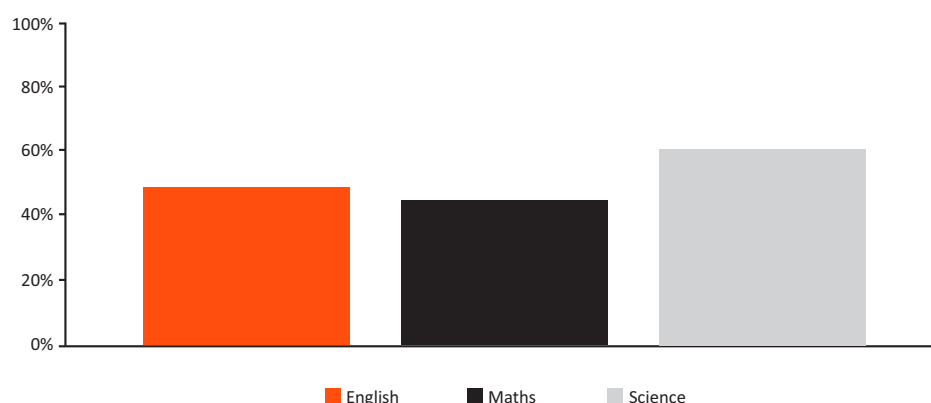
At the same time as Diplomas appear, the academic post-14 route is being undermined (Chapter 6). Core GCSEs such as science have recently been ‘reformed’, leading to widespread complaints that content on the underlying methodologies of the subject have been replaced by an undesirable focus on ‘scientific literacy’ (e.g. mobile phones and global warming). GCSE Mathematics is now in the process of being similarly ‘reformed’. The introduction of Vocational GCSEs has further blurred the lines between the different routes, causing even more confusion for students. Meanwhile, only a very small number of young people have access to the only genuinely vocational post-14 route available: Young Apprenticeships (see Chapter 8), which allow participants to spend two days a week in a workplace (compared with the ten days over two years mandated in the Diplomas).

This report is split into two halves, one on the key issues involving the teaching of core skills in primary schools - the National Strategies and SATs – and one on secondary schools which looks at the development of these core skills through the Secondary National Strategy and at post-14 routes including GCSEs, Diplomas and Young Apprenticeships. We decided not to look at the broader curriculum at either primary or secondary level (though we emphasise the importance of a wide-ranging curriculum) as we wanted to focus on those key skills that are most essential to the future success of young people and their potential employers. We felt that it was important, given this context, to include a discussion on post-14 routes, as their success or failure is of key importance to employers. This discussion will also help to provide the context for our second Skills Programme report due in Autumn 2009 on work-based learning.

Primary section

One side-effect of the introduction of national testing at 7, 11 and 14 in the early 1990s was that it provided strong evidence for a decline in standards in primary maths and English that many suspected had been happening for some time. Key Stage 1 (KS1) tests for 7 year olds were introduced in 1991, followed by tests at Key Stage 3 (KS3) and Key Stage 2 (KS2) in 1993 and 1995 respectively.² The early results gave cause for concern. Figure 1³ shows that in the core subjects, less than half of pupils were reaching the expected level of attainment (Level 4 on the National Curriculum 10-point scale of achievement) in English and maths by the time they left primary school and they fared little better in science.

Figure 1: Percentage of pupils who reached Level 4 or above by the end of primary school (Key Stage 2) in 1995



² *Popular questions*, Department for Children, Schools and Families (DCSF), see www.dcsf.gov.uk/popularquestions/questions.cfm?key-words=-1&gatewayCategoryID=11&mainCategoryID=246&expandID=0&new=0

³ *National Curriculum Assessments at Key Stage 2 in England 2008 (Provisional)*, DCSF, see www.dcsf.gov.uk/rsgateway/DB/SFR/s000804/index.shtml

⁴ OFSTED, *The Annual Report of Her Majesty's Chief Inspector of Schools: Standards and Quality in Education 1995/1996*, TSO, London 1997, p. 11

⁵ *Ibid* p. 11

⁶ *Ibid* p. 14

These results confirmed a growing consensus on the weaknesses in primary school teaching. During their annual inspection in 1995/1996, the Office for Standards in Education (OFSTED) noted that “many pupils are not able to read accurately [and] phonic work in particular needs to be strengthened in many schools”⁴ while poor writing skills were identified through “weak spelling and sentence construction [as well as] limited vocabulary”.⁵ OFSTED believed that “pupils’ performance in English and other subjects inevitably suffers in those schools where there is no systematic programme for the teaching of reading. ...There is an obvious and important difference between an uncoordinated mix of methods and a coherent reading programme.”⁶ The examination of teaching in mathematics found that “in schools where a substantial amount of mathematics is taught directly to the whole teaching group or class ...standards are generally

higher”⁷ while also noting that “too many teachers ...provide excessive amounts of individual work”.⁸ The seeds of the literacy and numeracy strategies were already beginning to emerge.

With a General Election approaching, David Blunkett, then Shadow Secretary of State for Education, saw the political opportunity in tackling this issue and set up a Literacy Task Force in May 1996 and a Numeracy Task Force in May 1997 to develop National Strategies aimed at bringing about improvements in these core skills. The final reports from each task force, ‘The Implementation of the National Literacy Strategy’⁹ in 1997 and ‘The Implementation of the National Numeracy Strategy’¹⁰ in 1998 led to the introduction by the new Labour government of the dedicated ‘Literacy Hour’ and ‘Numeracy Hour’ in every primary school across the country (these ‘Hours’ were never statutory but there was a strong expectation that schools would use them).

This represented the first concerted attempt to introduce structure and discipline in reading, writing and maths lessons into primary schools from the centre. Over the following twelve years, trying to raise standards from the centre became the hallmark of Government policy, even though the diminishing returns have long been apparent. In the first chapter of this section we look at how the National Strategies have evolved and the impact they have had on performance; in Chapter 2, we look at the programmes that been introduced subsequently to help the children being failed by the National Strategies; in Chapter 3, we look at how the testing regime is distorting teaching in primary schools; and in the final chapter we show how decentralising the system and increase autonomy for schools, within the right framework of information and incentives, could help to boost standards.

Recently there has been some criticism, most notably from the Cambridge Primary Review, that the core skills of literacy and numeracy have been given too much attention in primary schools to the detriment of other, more creative subjects. While we agree that the mechanisms the Government have used – the National Strategies and a focus on assessment – have been counter-productive, we also think it is important to emphasise that without a solid grounding in literacy and numeracy there can be no real creativity or any true understanding of other subjects. Nothing is more important to the future success of the child and so nothing should be given greater priority.

7 Ibid p .12

8 Ibid p .15

9 Department for Education and Employment (DfEE), *The Implementation of the National Literacy Strategy: The Final Report of the Literacy Task Force*, HMSO, London 1997b

10 DfEE, *The Implementation of the National Numeracy Strategy: The Final Report of the Numeracy Task Force*, HMSO, London 1998

1

The Primary National Strategy

The primary school strategies for literacy and numeracy were designed in response to the first few years of national assessment, which indicated a severe problem in our primary schools. Though schools have never been forced to follow the strategies, a huge amount (both financially and politically) was invested in them and any disobedient schools soon found themselves under huge pressure from local authority advisors (paid for through national strategy funding) to participate. As an attempt to drive up standards from the centre, they represented an educational experiment unique to this country. In this chapter we look at how the strategies have evolved and the relatively poor impact they have had on attainment. We go on to explain why they have had so little impact and in Chapter 4, we offer an alternative that would give more freedom to schools while offering a framework of information and incentives that would help avoid a return to the patchy provision seen in previous decades.

How the initial National Literacy Strategy (NLS) and National Numeracy Strategy (NNS) worked

The original strategies shared five foundations:

1. A 'Framework', in which yearly teaching programmes dictated the term-by-term objectives for the class that set out what should be taught, how it should be taught and when it should be taught right through from Reception to Year 6
2. A set of 'strands' that linked the Framework to the content in the National Curriculum
3. An emphasis on direct, instructive teaching
4. The explicit use of target setting and regular assessments of pupils against the 10-point National Curriculum levels in each subject
5. Improving management in the classroom and in the school curriculum

Literacy

The NLS predominantly focused on reading and writing, although speaking and listening were implicitly involved. The methods endorsed for teaching reading were particularly controversial. The key idea was that "all teachers know that pupils become successful readers by learning to use a range of strategies to get at the meaning of a text".¹¹ This was to be delivered through the 'searchlights' model of teaching children how to read (discussed in detail later in this chapter), which outlined the four building blocks of reading that teachers had to cover. With regard

11 DfEE, *The National Literacy Strategy: Framework for teaching literacy*, DfEE Publications, Suffolk 1998, p.3

National Curriculum levels

The National Curriculum was introduced ten years before the NLS and NNS came into effect, and along with it came the new National Curriculum 'levels'.¹² While the National Curriculum focussed for the most part on the content to be taught in classrooms, the new 'levels' were intended to help teachers judge how well their pupils were performing and whether they were progressing at the right pace.¹³ It was eventually decided, after much discussion, to have ten incremental levels across primary and secondary school, with key points such as the end of primary school being assigned a particular level that pupils had to reach in order to be showing sufficient progress. When the National Curriculum tests were introduced in the early 1990s, a pupil's performance was therefore judged against this ten-point scale, and it was expected that pupils would reach Level 2 on the ten-point scale in each of the core subject tests at the end of KS1 (age 7) and subsequently reach Level 4 in their tests at the end of KS2 (age 11). Table 1 illustrates how the National Curriculum levels match with year groups and expectations of attainment at different ages:

Table 1: How pupils progress through Key Stages and National Curriculum levels at primary school

Age	School year	Key stage	National Curriculum level (expected)
3-5	Reception	Foundation	Pupils should reach Level 2 by age 7
5-6	1	Key Stage 1	
6-7	2	Key Stage 1	
7-8	3	Key Stage 2	Pupils should reach Level 4 by age 11
8-9	4	Key Stage 2	
9-10	5	Key Stage 2	
10-11	6	Key Stage 2	

In addition to assigning pupils a broad level whenever their work was formally assessed, teachers were able to place pupils at the higher or lower end of each level by classing them as (a), (b) or (c). For example, a pupil who has reached Level 2 in English but is towards the bottom end of Level 2 would be classed as working at Level 2(c), whereas a pupil at the top end of Level 2 would be classed as Level 2(a). Since the introduction of standardised tests in the early 1990s, these levels and sub-levels have become the focal point for assessment within the National Strategies as well as being used to set local and national targets for the percentage of pupils who were expected to reach particular levels by the end of each Key Stage.

to writing, the searchlights model was used to reinforce the strategies used in reading and it was deemed "important that pupils learn to write independently from an early stage".¹⁴ In addition, as children get older "there [was] a progressive emphasis on the skills of planning, drafting, revising, proof-reading and the presentation of writing" while the Framework also expected pupils "to continue to work on autonomous strategies for spelling and correcting their own mistakes."¹⁵

The three strands that originally guided the NLS were described as (with examples from the Framework for the Reception year):

- Word level (e.g. recognising, exploring and working with rhyming patterns, such as learning nursery rhymes)
- Sentence level (e.g. that words are ordered left to right and need to be read that way to make sense)

¹² DES, *Task Group on Assessment and Testing: A Report*, HMSO, London 1988. Cited in House of

¹³ *Level best? Levels of attainment in national curriculum assessment*, The Association for Achievement and Improvement through Assessment, see www.aaia.org.uk/pdf/2001DY-LANPAPER4.PDF

¹⁴ Ibid p.5

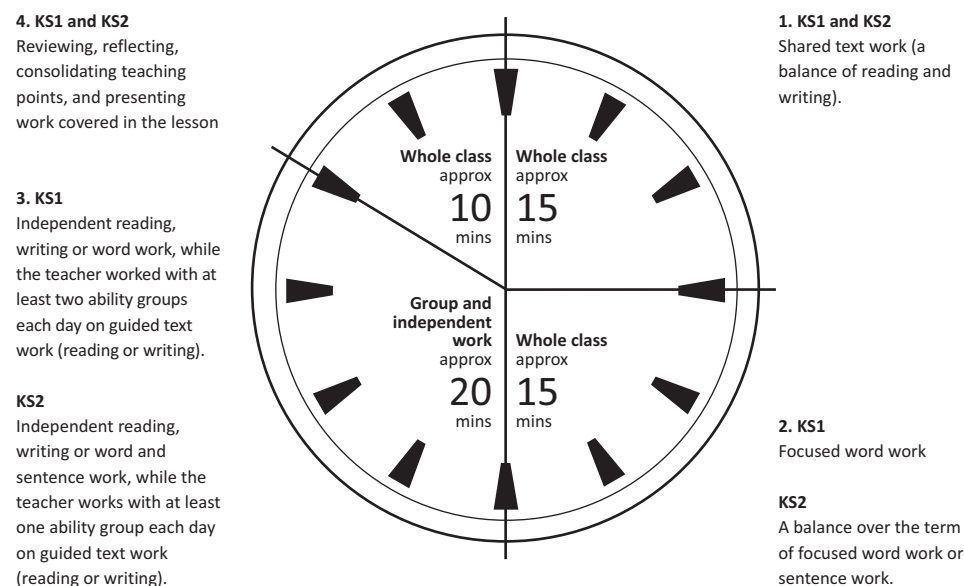
¹⁵ Ibid p.5

- Text level (e.g. to understand and use correctly terms about books and print: book, cover, beginning, end, page, line, word, letter, title)

Objectives for each term were listed under these headings. Teachers were expected to introduce tasks on the basis of what each strand stated they should be covering at any given point in the year, and “a minimum of 75% of the term’s reading and writing [were supposed to be] within the designated range [of specified topic areas and objectives]”.¹⁶

The Literacy Hour was the vehicle designed to deliver the Framework. Assigning an hour to literacy each day reflected the recommendation made in the 1994 Dearing Report that 180 hours of English be taught directly at KS1 and KS2 across the 36 weeks in the academic year.¹⁷ The NLS split the literacy hour into distinct segments, as illustrated in Figure 2. The prescriptive nature of the strategy went beyond outlining the structure of the lesson. Beyond the classroom environment, the strategy offered “a structure of classroom management, designed to maximise the time teachers spend directly teaching their class ...to shift the balance of teaching from individualised work, especially in the teaching of reading, towards more whole-class and group teaching” as well as “[providing] continuity of planning and teaching throughout the school”.¹⁸

Figure 2: Structure of the Literacy Hour



¹⁶ Ibid p.6

¹⁷ Dearing R, *The National Curriculum and its Assessment: Final Report*, School Curriculum and Assessment Authority, London 1994

¹⁸ DfEE, *The National Literacy Strategy: Framework for teaching literacy*, DfEE Publications, Suffolk 1998, p.10

¹⁹ DfEE, *The National Numeracy Strategy: Framework for teaching mathematics from Reception to Year 6*, DfEE Publications, Suffolk 1999, p.11

Numeracy

Many of the characteristics of the NLS were also evident in the NNS, in which “each class teacher was expected to provide a daily lesson for mathematics” lasting an hour by the end of primary school and teachers were also expected “to find time in other subjects for pupils to develop and apply their mathematical skills.”¹⁹ The dedicated numeracy lesson was split into:

- Oral work and mental calculation (about 5 to 10 minutes): whole-class work to rehearse, sharpen and develop mental and oral skills
- The main teaching activity (about 30 to 40 minutes): teaching input and pupil activities work as a whole class, in groups, in pairs or as individuals
- A plenary to round off the lesson (about 10 to 15 minutes)²⁰

As the Framework declared that “the daily mathematics lesson is appropriate for almost all pupils”, any differentiation would come through the teachers’ targeting of oral and written work within a whole-class setting.²¹ The Framework went as far as claiming that “individual needs do not necessarily warrant individual attention.”²²

The five strands of the NNS were (with examples from the objectives for Reception classes):²³

- Numbers and the number system (e.g. recite the number names in order, continuing the count from a given number)
- Calculations (e.g. begin to use the vocabulary involved in adding and subtracting)
- Solving problems (e.g. solve simple problems or puzzles in a practical context, and respond to ‘What could we try next?’)
- Measures, shape and space (e.g. begin to understand and use the vocabulary related to time; sequence familiar events; begin to know the days of the week in order and read o’clock time)
- Handling data (starts in Year 1 instead of Reception; e.g. solve a given problem by collecting, sorting and organising information in simple ways)

The emphasis on target setting was more explicit in the NNS.²⁴ Teachers were expected to carry out informal ‘short-term assessments’ of pupil progress during each lesson. This was supposed to be supplemented with ‘medium-term assessments’ matching pupils to Framework objectives and then comparing this against specific individual targets, although it was “not necessary or even feasible to check and record each pupil’s individual progress against every single teaching objective in mathematics.”²⁵ Having identified and recorded each pupil’s strengths and weaknesses relative to the objectives through medium-term assessments, these were to be discussed with each pupil every term to make sure they understood what was expected of them. At the end of the academic year, the ‘long-term assessments’ were intended to “assess pupils’ work against the key objectives for the year [and] against national standards” in addition to providing information on progress for the benefit of parents and headteachers.²⁶

The impact of the National Strategies

While the desire to improve basic literacy and numeracy standards was welcome, the new and highly prescriptive burden placed on teachers was considerable and “three-quarters of the teachers ... felt the effects [of Key Stage tests] on workload had been detrimental.”²⁷ Nevertheless, the Government assumed the introduction of the strategies would yield immediate positive results. They set ambitious targets for literacy and numeracy: 80% of all 11-year-olds were to achieve at least Level 4

20 Ibid p.13

21 Ibid pp.19-20

22 Ibid p.21

23 Ibid p.39

24 Ibid pp.33-37

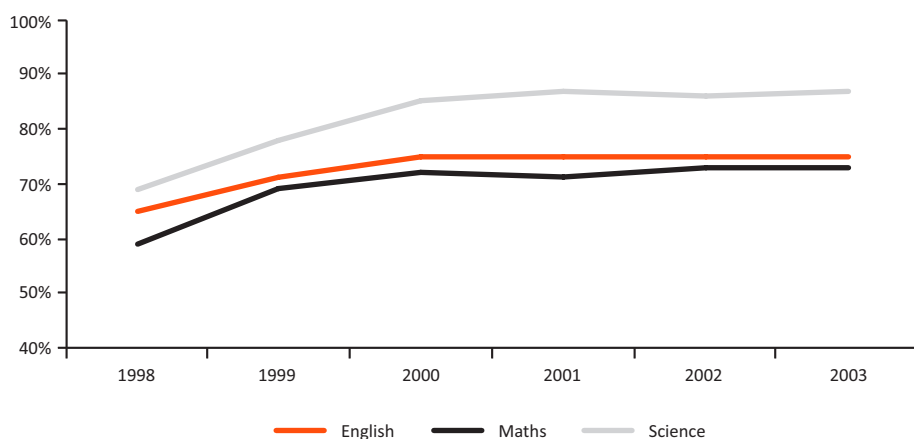
25 Ibid p.34

26 Ibid p.37

27 NUT survey of NC tests (2003)

in English and 75% achieve at least Level 4 in mathematics by 2002.²⁸ To help achieve these targets, in 1999 and 2000 the Government published 70 separate documents for schools to help them deliver the strategies²⁹ and local authorities were asked to act as consultants to the schools.

Figure 3: Percentage of pupils who reached Level 4 or above by the end of primary school (Key Stage 2)



28 DfEE, *The National Numeracy Strategy: Framework for teaching mathematics from Reception to Year 6*, DfEE Publications, Suffolk 1999, p.2

29 Search completed on National Strategies website before it was re-designed at the end of 2009 (search facility for original documents is no longer available on new website).

30 OFSTED, *The national literacy and numeracy strategies and the primary curriculum*, OFSTED publication centre, London 2003

31 *National Curriculum Assessments at Key Stage 2 in England 2008 (Provisional)*, DCSF, see www.dcsf.gov.uk/rsgateway/DB/SFR/s000804/index.shtml

32 OFSTED, *The national literacy and numeracy strategies and the primary curriculum*, OFSTED publication centre, London 2003, p.4

33 Ibid p.17

34 Ibid p.44

35 Ruddock G et al, *Where England stands in the trends in international mathematics and science study (TIMSS)*, National Foundation for Educational Research, Slough 2003, pp.8-9

36 Mullis IVS et al, *PIRLS 2001 International Report: IEA's Study of Reading Literacy Achievement in Primary Schools*, Boston College, Massachusetts 2003, p.26

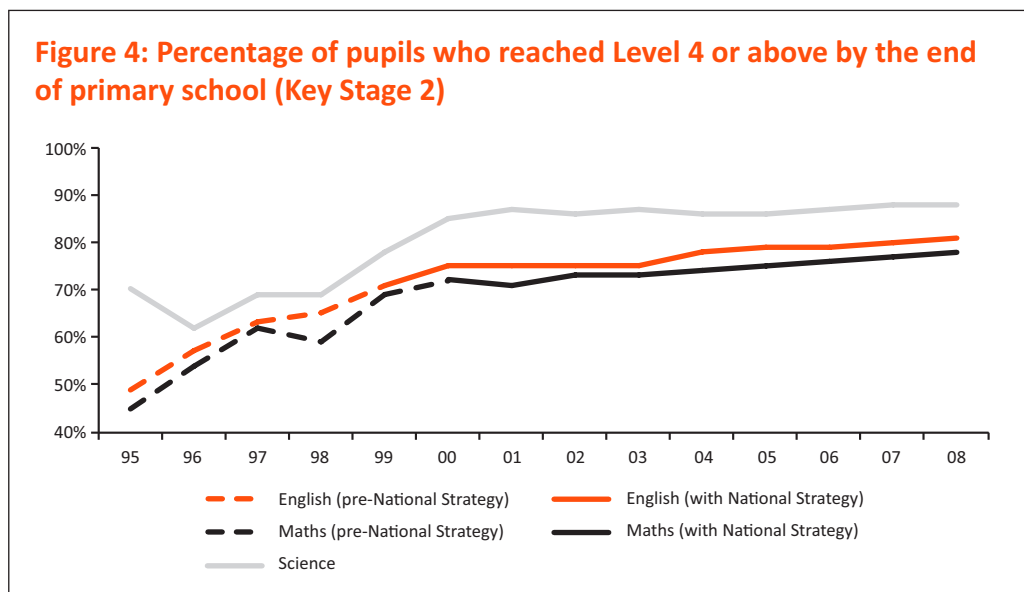
By the time OFSTED analysed the performance of the NLS and NNS up to 2002,³⁰ the percentage of students reaching Level 4 by the end of primary school had risen in all three core subjects – from 65% to 75% in English, from 59% to 73% in maths and from 69% to 87% in science (Figure 3).³¹ Even though this meant the Government's original targets had not been met, this still appeared to be a significant improvement. Having visited 300 primary schools as part of their evaluation, OFSTED concluded that “the introduction of the two strategies has had a considerable impact on the primary curriculum”³² and had led to “an overall improvement in the quality of teaching of literacy and mathematics”.³³ It was also noted that the new approach to literacy and numeracy was having a positive impact on other subjects, as demonstrated by “teachers’ sharper focus on objectives, ...better teaching of subject-specific vocabulary and pupils’ more confident use and understanding of it, the use of a wider range of genres in writing, ...improved support for pupils in organising their own writing through the use of writing frames, lists of key words and shared or guided planning [and] an improved structure to some lessons, particularly the use of a plenary session to consolidate learning”.³⁴

This seemed to be supported by improved performance in international comparative assessment. The Trends in International Mathematics and Science Survey (TIMSS) survey in 2003 ranked England fifth out of 25 countries in science and ninth in maths and noted that “in both science and mathematics England’s score at grade 4 [equivalent to Year 5 in English primary schools] increased significantly from 1995 to 2003.”³⁵ This apparent success in science and maths was mirrored by the Progress in International Reading Literacy Study (PIRLS) in 2001, which ranked England third out of 35 countries,³⁶ and the Programme for International Student Assessment (PISA), which ranked

England seventh for reading, eighth for maths and fourth for science out of 28 countries.³⁷

The Government had evidently seen and heard enough to make them believe that the changes they had implemented in primary schools were working and needed to be expanded. Such was the perceived success of the National Strategies, ‘frameworks’ for English, maths, science and ICT were published for Key Stage 3 (age 11-14) in 2001 and 2002 and were later subsumed into the new Secondary National Strategy from 2005 (see Chapter 5).

Yet in retrospect it is clear that much of this success was a cruel illusion. For a start, most of the improvement in SATs results happened *before* the Strategies were introduced. SATs in English and maths were introduced in 1995 and, as can be seen in Figure 4, results rapidly improved in both subjects in the following years as schools placed additional emphasis on these subjects, teachers learnt how to teach to the tests and the tests were made easier (discussed below). By the time that the National Strategies were first assessed in 1999 and 2000 in English and maths respectively, the initial burst in performance had already begun to tail off, though incremental increases continued. Science results followed a very similar pattern, though there was no National Strategy for this subject. Thus, although the Strategies may appear to have improved results in the first few years of their existence, the rate of improvement was in fact lower than it was before the strategies were introduced.



In short, the majority of the progress towards the Government’s targets happened before the NLS and NNS were introduced. Moreover, this progress was largely artificial: partly due to teachers acclimatising to the tests and partly due to a reduction in testing standards that was first picked up in 2001 by researchers at Durham University. The researchers, Peter Tymms and Carol Taylor Fitz-Gibbon, pointed out that “the changes seen between 1995 and 1999 are so dramatic and so out of step with the other longitudinal data as to raise questions about their being true representations of changes in standards.”³⁸ In response, the Qualifications and Curriculum Authority (QCA) conducted their own analysis of

37 DfES, *PISA 2000: Student Achievement in England*, HMSO, London 2002, pp.2-3

38 Tymms, P & Fitz-Gibbons, C, “Standards, Achievement and Educational Performance: A cause for celebration?”, in Phillips R, & Furlong J (eds), *Education, Reform and the State: Twenty-five years of politics, policy*, Routledge-Farmer, London, chapter 11, pp.156-173, 2001

the test standards from 1996 to 2001 and reported that “there may have been a shift towards more lenient standards in Key Stage 2 English test thresholds between the 1996 and 1999 versions, especially at levels 4 and 5.”³⁹ Evidence was presented that showed changes in level boundaries over the years to be “over-compensating for the difference in (Reading) test difficulty”, leading to higher scores, and the “cut-scores also appeared relatively lenient, especially at levels 4 and 5 – where increases of 5 and 7 marks respectively were required to equate [English test scores in 2000] to 1996.”⁴⁰ The conclusion reached by the QCA was that “about half the improvements in test results between 1996 and 2000 may have resulted from changes in test standards.”⁴¹ Similarly in science, “there [were] signs that a small part of the very large improvement in national test results

reported between 1996 and 2001 may be a product of a shift in test standards.”⁴²

Setting these standards was, until recently, the responsibility of the National Assessment Agency (NAA) who were supposed to develop, administer, monitor and report on SATs (this agency was subsumed into the QCA in December 2008).⁴³ The NAA found that the setting of the mark boundaries is a particularly

complex aspect of the two-year process of developing and delivering each set of tests.⁴⁴ A small selection of pupils are asked to sit new test papers that are similar but not identical to the final SAT papers for that year. This allows the NAA to collect ‘pre-test’ data on how well pupils perform with the new papers, which is then used to set ‘draft levels’ (i.e. provisional mark boundaries) for each level in January or February. Once the draft level boundaries are in place, experienced markers discuss the draft boundaries as they mark the real SATs examination papers (late May/early June) and compare them to performance in previous years.⁴⁵ The final meeting is held in June, at which the decisions are made regarding the mark boundaries for each level.

It is easy to see how this process could become politicised. The final level setting meeting in June (after all the SAT papers have been marked) was chaired by a member of the NAA “responsible to QCA’s chief executive, for ensuring that ...the level thresholds recommended to QCA’s chief executive are secure and valid.”⁴⁶ Furthermore, the QCA ‘regulation team’ monitored these level setting meetings and advised the QCA’s chief executive on the outcomes of the meeting. While the NAA supervised the entire test development process, the final decision on the level thresholds was still made by the QCA’s chief executive.⁴⁷ The language used by the QCA is also instructive. As mentioned above, the mark thresholds for each level are expected to be “secure and valid”, while the QCA’s own code of practice states that “the level thresholds [must] represent standards comparable to previous years”. However, at no point does any of the literature or guidance on level setting state that standards should remain ‘constant over time’.

As Figure 5⁴⁸ shows, the mark boundaries for passing SATs at Level 4 (shown as dotted lines for each core subject) generally fall year on year, while the percentage of pupils achieving Level 4 (shown as solid lines) rises. Although the Level 4 pass mark for science has remained relatively stable, the pass mark for maths has fallen from 52 out of 100 to 45 and in English it has fallen from 51 out of 100

“Issues around test standards and grade boundaries raise the question of whether there has been any real increase in performance since the SATs were introduced”

39 Massey, A et al, *Comparability of national tests over time: key stage test standards between 1996 and 2001: Final report to the QCA of the Comparability Over Time Project*, QCA Publications, London, p.216

40 Ibid p.216

41 Ibid p.222

42 Ibid p.218

43 NAA to be fully integrated into QCA, NAA, see www.naa.org.uk/naa_20783.aspx

44 Test development, level setting and maintaining standards, NAA, see www.naa.org.uk/naa_18939.aspx

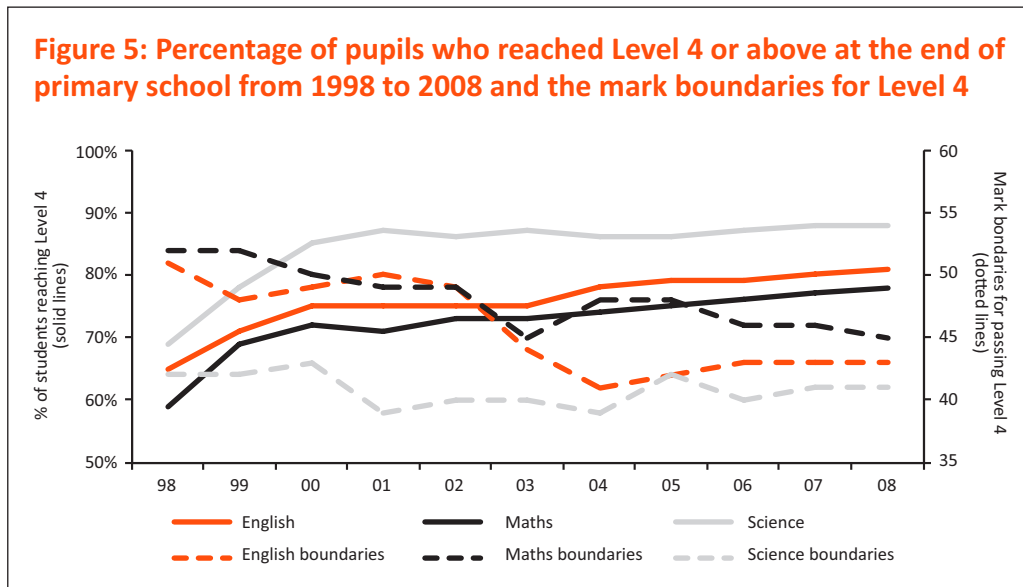
45 Level Setting, NAA, see www.naa.org.uk/naa_18977.aspx

46 QCA, *National Curriculum Assessments: Code of Practice*, QCA, London 2007, p.53

47 Ibid p.53

48 National Assessment Agency Archives – Level threshold tables, NAA, see www.naa.org.uk/naa_18985.aspx

to 43. These plummeting pass marks for the core subjects since 1998 therefore offer one explanation as to why SAT results have increased since the Labour Party came to power and why recent results have shown a much slower rate of improvement.



These issues around test standards and grade boundaries raise the question of whether there has been any real increase in performance since the SATs were introduced. Peter Tymms has tried to answer this by collating pupil performance data from a range of sources including the Performance in Primary Schools (PIPS) test run by Durham University. Tracking variations in performance over time from several different data sources offered a much better picture of core skills. The results of his analysis were not encouraging. In reading, Tymms concluded that “there had been an improvement” in general ability, but described this as “a very small effect and could easily result from test practice”.⁴⁹ An identical pattern was noted for maths in which the “data from the studies reviewed consistently showed a rise in mathematics scores [but] the rise was smaller than the statutory [Key Stage 2] test data suggested.”⁵⁰ Tymms also noted that “resources and effort were targeted at those pupils who were within range of achieving a Level 4 because that is the standard by which the success of schools was judged”⁵¹ instead of schools taking time to support each individual pupil, irrespective of ability. He believes that this obsession with a wholly arbitrary benchmark for pupil achievement “has the unfortunate implication that students below Level 4 have in some way failed their school or failed in their schooling [which] is extremely unethical.”⁵²

The Statistics Commission agreed that Tymms had “[provided] convincing reasons – in the incentives for teachers to teach test technique and to teach to the test – why introduction of a new ‘high stakes’ test such as SATs can be expected to lead to an initial rise in test scores, even if it does nothing to raise standards.”⁵³ They also supported his claim that “the sharp rise in KS2 scores in the latter 1990s cannot be simply interpreted as a rise in schools performance standards [as] there are a number of qualifications that need to be made [yet] Government

49 Tymms P & Merrell C, *Standards and Quality in English Primary Schools over time: The National Evidence*, The Primary Review, University of Cambridge 2007, p.14

50 Ibid p.11

51 Ibid p.14

52 Fitz-Gibbon C & Tymms, P, “Technical and ethical issues in indicator systems: Doing things right and doing wrong things”, *Education Policy Analysis Archives*, 10(6), 2002, see epaa.asu.edu/epaa/v10n6/

53 Statistics Commission, *Measuring Standards in English Primary Schools*, HMSO, London 2005, p.2

Departments have usually failed to mention any caveats about other possible reasons for rising test scores in their public comments.”⁵⁴ The Statistics Commission summarised their view on the analysis done by Tymms thus:

“The Commission believes that it has been established that the improvement in KS2 test scores ...substantially overstates the improvement in standards in English primary schools ...[but] there was nevertheless some rise in standards.”⁵⁵

Both Tymms and the QCA had produced sufficient evidence to convince the Statistics Commission that the early improvements were nowhere near as impressive as the Government wished them to be. The Commission was persuaded by this evidence that “statutory test data [is] not ideal for monitoring standards over time.”⁵⁶ Unfortunately, the then Secretary of State for Education Ruth Kelly refused to accept these conclusions and instead asked the Permanent Secretary Sir David Normington to write a rebuttal,⁵⁷ which stated that “we do not accept your conclusions. We do not believe the commission has the evidence or the expertise to comment on teaching practice in relation to tests. I would ask you to revisit your conclusions and set the record straight.”⁵⁸ The Statistics Commission was shut down in March 2008.

The illusory improvements in KS2 SAT scores in the early days of the National Strategies coupled with some encouraging words from OFSTED had spurred on the Government. However, by the time the NLS and NNS reached their fifth anniversary, independent sources were suggesting that their early success was not as definitive as it may have seemed and that the statistics showed a significant slow-down in improvement after a burst that had taken place before the strategies were actually introduced. Faced with mounting evidence that all was not well, the Government could have paused and reassessed their methodology for teaching core skills at primary school. Instead they widened the net.

The 2003 paper ‘*Excellence and Enjoyment: A Strategy for Primary Schools*’⁵⁹ marked the next phase of the National Strategies. Having already created the KS3 strategy for secondary schools in 2001, the Government combined the NNS and NLS to form the Primary Strategy – since renamed the Primary National Strategy (PNS) – while simultaneously declaring “that our primary schools are not just improving relative to past performance, but are world leaders”.⁶⁰ The PNS was intended to “extend the sort of support provided by the Literacy and Numeracy Strategies to all of the foundation subjects”⁶¹ while also merging the separate teacher and test assessments of pupil performance at KS1. The inception of the PNS was accompanied by new literacy and numeracy targets that set the skills bar even higher: “over the country as a whole, at least 85% of 11-year-olds [will] reach Level 4 in literacy and numeracy as soon as possible, and to improve rates of achievement at Level 5”⁶² – all this despite not meeting the 2002 targets for literacy and numeracy.

Unsurprisingly, given what we now know about why test scores improved so dramatically between 1997 and 2002, the expansion of the National Strategies has not had the desired effect. Since 2004, SAT scores in English have risen by just 3%, by 4% in maths and by a mere 2% in science. Figure 6⁶³ shows that the rates of improvement seen in the first few years of the NLS and NNS have not been maintained. In 2008, a decade after the National Strategies came into effect, 19% of pupils still fail to reach the minimum standards for English at the end of primary school and 22% fail to reach the minimum standards for maths.

54 Ibid p.3

55 Ibid p.3

56 Ibid p.6

57 Tymms P & Merrell C, *Standards and Quality in English Primary Schools over time: The National Evidence*, The Primary Review, University of Cambridge 2007, p.9

58 Kelly insists she is right even when statistics say she is wrong, The Daily Telegraph, 28th April 2005, see www.telegraph.co.uk/news/uknews/1488743/Kelly-insists-she-is-right-even-when-statistics-say-she-is-wrong.html

59 DfES, *Excellence and Enjoyment: a strategy for primary schools*, HMSO, London 2003

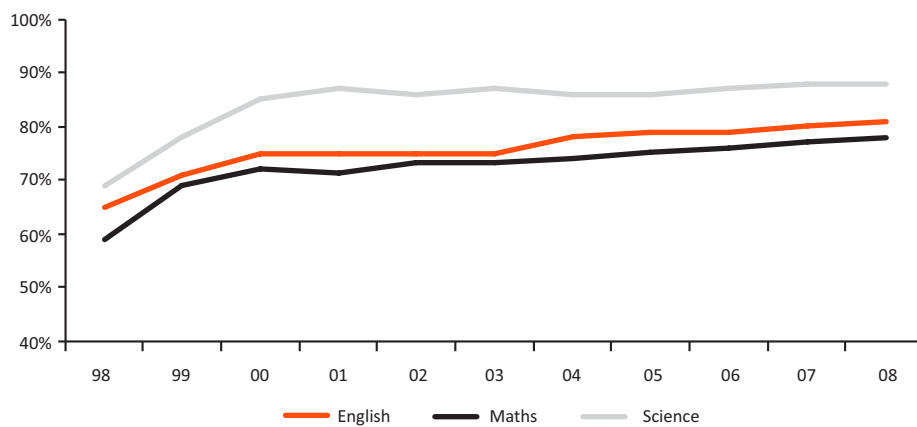
60 Ibid p.11

61 Ibid p.5

62 Ibid p.22

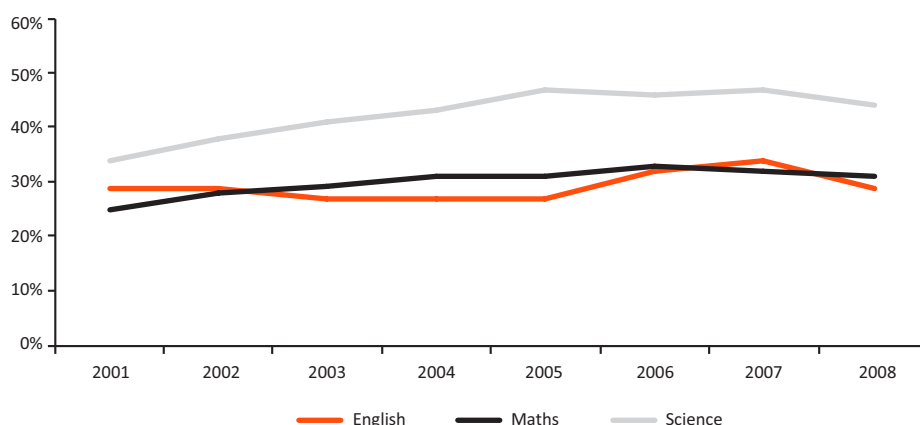
63 *National Curriculum Assessments at Key Stage 2 in England 2008 (Provisional)*, DCSF, see www.dcsf.gov.uk/rsgateway/DB/SFR/s000804/index.shtml

Figure 6: Percentage of pupils who reached Level 4 or above by the end of primary school (Key Stage 2)



It is also clear that the strategies are failing to support 'high achievers'. Figure 7⁶⁴ shows that the number of children achieving Level 5 or above by the time they finish primary school has actually decreased in the last year. From 2007 to 2008, the percentage of pupils reaching Level 5 fell in all three core subjects – by 5% in English, by 1% in maths and by 3% in science. In English, the 5% drop means that the percentage of students reaching Level 5 is the same as it was seven years ago, despite hundreds of millions of pounds being spent on the strategies. In all three subjects, the 2008 percentages are almost identical to those in 2004, bringing into question the ability of the PNS to cater for the brightest pupils.

Figure 7: Percentage of pupils who reached Level 5 or above in the core subjects by the end of primary school (Key Stage 2)



Not only have SAT scores remained unresponsive to the strategies, performance in international league tables has fallen away from the impressive PIRLS ranking in 2001 and PISA ranking in 2000. In 2001, PIRLS put England third

64 Ibid

out of 35 countries for reading achievement⁶⁵ but by 2006 England had slumped to 19th place,⁶⁶ registering the third highest (and a statistically significant) drop in performance.⁶⁷ This was especially surprising given that English pupils taking part had an extra year of schooling before sitting the test compared to almost every other country. To make matters worse, England had the 13th highest performance gap between boys and girls⁶⁸ and showed a long tail of underperformance with 15% of pupils falling into the lowest scoring category - the highest proportion of any top 20 country.⁶⁹ The 2006 update of the PISA rankings provided little respite for the Government. Having been seventh for reading, eighth for maths and fourth for science in 2000, the UK fell to 17th in reading, 24th in maths and 14th for science just six years later.⁷⁰ The 2007 TIMSS survey was slightly more encouraging as, having been ranked fifth for science and ninth for maths in 2003 for primary school pupils, England managed to maintain their overall performance by finishing seventh for both maths and science in 2007.⁷¹

The disparity between England's performance in PISA and TIMSS indicates the problems with using international comparatives to make definitive points. There are numerous methodological problems. For a start, the kind of questions included usually favour one type of education model over others. For example, PISA questions tend to measure subjects ability to apply abstract skills while TIMSS tends to measure the kind of content contained in the English curriculum. Furthermore, the difficulty of measuring comparable samples between countries is a huge problem, as one recent study noted: "children in different countries start school at different ages and this makes it impossible to create samples of the same age with the same amount of schooling."⁷² The Government (like a number of others) has often distorted the sample seemingly on purpose. In 2003 England was not even included in PISA as not enough state school children sat the test⁷³ and, as a study produced for the Cambridge Primary Review has found, "the most damning revelation [is] that England exclude a wider group of children with special needs than other countries."⁷⁴ Of the 35 countries taking part in PIRLS 2001, only three excluded more pupils from their sample population than England.⁷⁵

65 Mullis IVS et al, *PIRLS 2001 International Report: IEA's Study of Reading Literacy Achievement in Primary Schools*, Boston College, Massachusetts 2003, p.26

66 Mullis IVS et al, *PIRLS 2006 International Report: IEA's Progress in International Reading Literacy Study in Primary Schools in 40 Countries*, Boston College, Massachusetts 2007, p.37

67 Ibid p.44

68 Ibid p.48

69 Ibid p.69

70 PISA 2006 *Science Competencies for Tomorrow's World*, OECD, see www.oecd.org/document/2/0,3343,en_32252351_32236191_39718850_1_1_1_1,00.html#tables_figures_dbase

71 Sturman L et al, *England's achievement in TIMSS 2007: National Report for England*, NFER, Slough 2008, p.3

72 Coe R & Tymms P, "Summary of research on changes in educational standards in the UK", in Harris M (ed), *Education Briefing Book*, Institute of Directors, London 2008, p.105

73 UK left out of education survey, BBC News, 19th November 2004, see news.bbc.co.uk/1/hi/education/4025775.stm

74 Tymms P & Merrell C, *Standards and Quality in English Primary Schools over time: The National Evidence*, The Primary Review, University of Cambridge 2007, p.15

75 Mullis IVS et al, *PIRLS 2001 International Report: IEA's Study of Reading Literacy Achievement in Primary Schools*, Boston College, Massachusetts 2003, p.287

76 Measured by the number of pupils failing to achieve Level 4 in both reading and writing

77 Measured by the number of pupils failing to achieve Level 4 in reading, writing and mathematics

Primary performance statistics

- Performance in English, maths and science has barely improved in the last two years, if at all
- Children's reading has scarcely improved since 2000
- The performance of high achieving pupils is starting to fall by as much as 5% a year
- Over 40% of the boys and almost 30% of the girls (around 200,000 children in total) who left primary school in 2008 cannot read and write properly⁷⁶
- Only 56% of the boys and 66% of the girls who left primary school in 2008 can read, write and count to the minimum standard⁷⁷
- Since the National Strategies began in 1998, over 1.6 million children have left primary school without achieving basic literacy, over 1.8 million have left without mastering basic numeracy and over a million have left not understanding basic science

The cost-benefit of the National Strategies

Given that the evidence suggests the National Strategies have had almost no impact on attainment, the huge amounts spent on them is a cause for concern. Since they were first introduced, the cost of the Strategies has rocketed.⁷⁸

Table 2: The cost of the National Strategies at primary school since their introduction (£ millions)

	Academic year (starting)											Total
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
National Literacy Strategy	62.7	72.8	84.5	102.6	101.2	107.4						531.2
National Numeracy Strategy		73.8	95.2	103	101.2	107.4						480.6
Primary National Strategy							131	185	198	206.5	195.4	915.9

Note: Figure for 2008 was provisional

Table 2 shows that from the date that they were first taught together in 1999 up to 2008, there has been a 33% increase in annual spending on the National Strategies. In 2009/10, a further £196.7 million has been allocated,⁷⁹ meaning that by 2010 the Government will have spent over £2.1 billion on the literacy and numeracy primary strategies.

Around 85% of the annual budget for the National Strategies is given to local authorities for implementation at the local level.⁸⁰ This money is spent on “school improvement teams” in the local authority, “coordinating the Strategies”, “supporting and challenging schools”, “advising schools on the implementation and use of the revised framework and supporting materials” and “working with schools to improve leadership.”⁸¹ This indicates just how centralised the strategies are, despite being technically non-statutory. In essence, schools are forced to work with local authorities because the National Strategies force the authorities to interfere in their work.

In addition to the tens of millions of pounds given annually to local authorities, £80 million a year is given to Capita, an outsourcing company with wide-ranging involvement in the public sector. As part of their five-year contract which began in 2005, Capita’s duties include “implementing the National Strategies in the most effective and efficient manner, including provision of training and support materials”, “working with Government Office teams and Ofsted inspectors to provide challenge and support to local authority staff to enable them to work effectively with schools to improve standards”, and “working with local authority children’s services teams and lead officer for school improvement to provide robust plans for the continuous improvement of standards in schools and settings.”⁸² As with local authorities, the existence of a contract to deliver the National Strategies is an indication of how heavily centralised and prescriptive the process is. The additional bureaucracy that is created by such a complicated web of organisations is diverting millions of pounds away from the schools themselves.

⁷⁸ Hansard, 14th October 2008, Column 1132W

⁷⁹ *The School Funding pages*, Teachernet, see www.teachernet.gov.uk/management/school-funding/

⁸⁰ NAO, *Mathematics Performance in Primary Schools: Getting the Best Results*, TSO, London 2008, p.24

⁸¹ Ibid p.24

⁸² Ibid p.24

Why so little impact?

What might be the reason for the very poor performance of the National Strategies in cost/benefit terms? One important factor is that the hierarchical nature of the strategies can demotivate headteachers and their staff. Many see the process of implementing the strategies as a “burden” rather than an opportunity. In addition, the strategies stifle innovation as, while the strategies are not compulsory, training and development resources have been focused entirely on implementing them. Schools who want to try something different are on their own.

Moreover, as we will see in Chapter 3, the increasing importance of high stakes testing has distorted some of the aims of the strategies. In 2005, researchers at the University of Durham studied the approaches of teachers in Year 6 – at the end of which pupils sit their KS2 SATs. They found that “all schools saw part of their role in Year 6 as guiding pupils through an intensive phase of preparation for the National Curriculum tests”,⁸³ which is undesirable if not unsurprising, and “intensive preparation for and practice of National Curriculum tests appeared to be seen in all schools as a natural thing to do” to the point where “without question national tests dominated classroom teaching of both [literacy and numeracy] in these schools for a large part of Year 6.”⁸⁴

Alongside these structural problems, however, there have been problems with the contents of the strategies. The literacy strategy has come in for particular criticism. In 2005 the House of Commons Select Committee on Education and Skills investigated how children were taught to read under the strategy.⁸⁵ Having interviewed a wide range of literacy experts, the Committee found that:

“[some Committee experts] described the NLS approach as fundamentally flawed and called for it to be withdrawn entirely” (p.15)

“We found particular concern from some [Committee experts] who considered that the NLS Framework for Teaching is too rigid in structure and leads to a dull and mechanical experience for pupils.” (p.16)

“Teachers were unanimous in their view that the Framework’s emphasis on language was undervaluing the literature entitlement in the national curriculum.” (p.17)

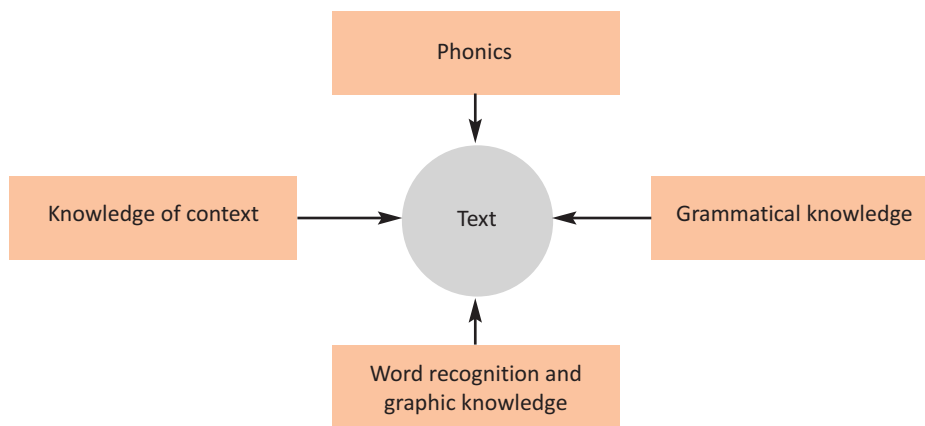
But the greatest criticism was reserved for the much-heralded ‘searchlights’ model of reading (outlined earlier in this chapter). As the Select Committee explained,⁸⁶ the NLS teaches reading in a very broad manner which includes decoding, comprehension, grammatical understanding and a general experience of books and texts. None of these aspects are prioritised when a child is learning to read, meaning that when a child encounters a new word they are encouraged to ‘work out’ the word either from the context, the sentence structure, by sounding out the word or by visually recognising the shape of the word. This approach has been termed the ‘searchlights’ model due to the need for children to ‘search’ for the correct meaning of a word (shown in Figure 8). The searchlights model claimed that reading is best taught by using a range of strategies simultaneously and is more effective for children who respond better to one particular approach than to others.

83 Bevertson S et al, *Teaching Approaches to Promote Consistent Level 4 Performance in Key Stage 2 English and Mathematics*, DFES Publications, Nottingham 2005, p.60

84 Bevertson S et al, *Teaching Approaches to Promote Consistent Level 4 Performance in Key Stage 2 English and Mathematics*, DFES Publications, Nottingham 2005, p.61

85 House of Commons Education and Skills Select Committee, *Teaching Children to Read*, TSO, London 2005

86 Ibid p.13

Figure 8: The ‘searchlights’ model for teaching reading

Teaching children to read with ‘synthetic phonics’ takes an entirely different approach by emphasising the importance of sounds when learning to read. Teaching phonics revolves around “establishing a secure correspondence between written letters and the sounds of language in the learner’s mind. Phonics programmes often begin by teaching the single letters of the alphabet as sounds (for example, ‘kicking k’ rather than the letter name ‘kay’), later moving on to more complex digraphs [which are pairs of characters that make a distinct sound] and, finally, the irregular spellings of the English language, which do not follow phonic rules.”⁸⁷

Despite protestations from Dr Kevan Collins, Director of the Primary National Strategy, that the searchlights model worked, the academics and researchers who gave evidence to the Select Committee were unanimous in their condemnation. Sue Lloyd, co-author of the ‘Jolly Phonics’ teaching programme, told the Committee that “the NLS initiatives were supposed to correct the imbalance between the results of boys and girls, as well as prevent the serious reading failure of the bottom 25%. Fairly soon it was obvious that this initiative was not working for these particular groups.” She went on to say that “synthetic phonics is the most effective way to teach reading”.⁸⁸ Dr Morag Stuart from the Institute of Education in London said the NLS “has missed an opportunity to get a generation of teachers who understood about reading”⁸⁹ and that “the model of reading which is presented to teachers [in the NLS] which is this black hole of four things [i.e. four ‘searchlights’] operating and disappearing into a text is completely and utterly misleading and bears no relation to any research on reading that I know of.”⁹⁰

In the end, two incontrovertible studies from Scotland won the argument for supporters of synthetic phonics. The first study, praised by the Education and Skills Select Committee,⁹¹ was undertaken in Clackmannanshire⁹² and followed children for seven years starting in the academic year 1997–1998. One group of children learnt to read using synthetic phonics, another group learned through a standard analytic phonics programme and a third group used an analytic phonics programme that contained intensive training on hearing sounds in words (see Table 3 for a comparison of synthetic phonics and analytic phonics). After 16 weeks of training, the synthetic phonics group were around seven months ahead

87 Ibid p.12

88 Ibid p.14

89 Ibid p.15

90 Ibid p.21

91 Ibid p.22

92 Johnson R & Watson J, *The effects of Synthetic Phonics teaching on reading and spelling attainment: A seven year longitudinal study*, The Scottish Executive (web only), 2005

of their chronological age and seven months ahead of the other two groups. The synthetic phonics pupils were also seven months ahead of chronological age in spelling and at least eight months ahead of the two analytic phonics groups (whose spelling was two to three months behind their chronological age).⁹³ Six years later, the synthetic phonics group had jumped to 3 years 6 months ahead in word reading and 1 year 9 months ahead in spelling of their chronological age⁹⁴ – even though these children had finished synthetic phonics training several years previously. The literacy gender gap was also eliminated.⁹⁵

Table 3: A comparison of the principles behind the two main forms of phonics teaching

Synthetic phonics	Analytic phonics
<ul style="list-style-type: none"> ● The reader learns up to 44 phonemes (the smallest units of sound) and their written symbols ● Taught before expecting children to read books, and pupils are only given a free choice of books once they can read fluently ● Focuses on teaching letter-sound correspondences at a quick pace (around one a day) and immediately teaches children how to blend the sounds for reading e.g. c-a-t is cat, b-u-s is bus, s-t-o-p is stop ● Children are taught to identify sounds within words and blend sounds/words together ● Teaches irregular keywords (i.e. tricky words) by blending sounds while getting the pupil to note the regular and irregular/unusual parts ● Uses the blending of sounds as the first and main strategy for reading unknown words ● Word patterns are only covered at a later stage and for spelling rather than for reading 	<ul style="list-style-type: none"> ● Teaches children to analyse whole words and detect phonetic or spelling patterns, then split them into smaller parts for decoding ● Starts with learning whole words by their shape (i.e. visually) and from books ● Blending sounds is only used as the last reading strategy instead of the first strategy ● Gradually introduces the alphabet letter names and sounds, and it tends to focus on the initial letter to help with word identification (often '<i>check the first letter with the word that you guessed</i>') ● Segmenting and blending sounds is taught away from texts instead of using the texts as part of the demonstration ● It uses picture cues, initial letter cues and context information for guessing unknown words rather than using sounds ● Uses text that has predictable sentences ● Word patterns are covered at a later stage

The second Scottish study – a ten-year longitudinal analysis in West Dunbartonshire, the second most deprived education authority in Scotland, which finished in 2007 – was even more impressive. The final report on the West Dunbartonshire project began by stating that their “vision of raising attainments and eradicating illiteracy across the whole school population is based not only on an educational imperative but also on a total commitment to psychological research.”⁹⁶ This was exemplified in the ‘preparatory studies’ before the main project began, in which addressing self-esteem and attitudes to reading were found to be crucial in tackling literacy underachievement.⁹⁷ Following this, five major studies were undertaken – each with a different focus. The first (and most important) study was an intervention programme delivered to over 3,000 pupils in almost 50 schools, with the following ten ‘strands’:

93 Ibid p.66

94 Ibid p.66

95 Ibid p.70

96 Mackay T, *Achieving the Vision: The Final Research Report of the West Dunbartonshire Literacy Initiative*, West Dunbartonshire Council, Dunbarton 2007, p.i

97 Ibid p.6

1. Phonological awareness and the alphabet
2. A strong and structured synthetic phonics emphasis
3. Extra classroom help in the early years
4. Fostering a 'literacy environment' in school and community
5. Raising teacher awareness through focused assessment
6. Increased time spent on key aspects of reading
7. Identification of and support for children who are failing
8. Lessons from research in interactive learning
9. Home support for encouraging literacy
10. Changing attitudes, values and expectations

The results were highly impressive. On all ten baseline assessment tests, there was "a systematic enhancement of scores on virtually every test for every group and across every year".⁹⁸ This was evident in the highest and lowest achievers, leading to significant reductions in the number of children with early reading difficulties. Not only were test scores improving across the board, the children being assessed in pre-school years were achieving similar scores to children two years older than them in previous years,⁹⁹ showing that the ten strands had an enormous impact on whole-school achievement as the implemented changes became "institutionalised".¹⁰⁰ There were, inevitably, some limitations in the research design such as class teachers carrying out the baseline assessments to which future scores were compared. That said, the sheer scale of the project and the statistically significant improvements seen across the entire ten-year period allow for confidence in the findings.

The success of synthetic programmes was such that by 2005 the Education and Skills Select Committee, the press and most importantly the Prime Minister Tony Blair and his education advisor Lord Adonis were expressing opposition to the literacy strategy. It is a tribute to the bureaucratic inertia created by hierarchical top-down programmes like the National Strategies that it took this kind of pressure to force a change. If schools had had the resources and information to choose their favoured method for teaching literacy, synthetic phonics might have taken hold much faster. Even when presented with incontestable evidence that synthetic phonics was the best approach the DfES insisted on a further review of the literacy strategy by Jim Rose, one of the original 'three wise men', who overhauled the primary curriculum in the early nineties. He reported back in 2006, concluding that "the searchlights model does not best reflect how a beginner reader progresses to become a skilled reader"¹⁰¹ and that "a model of reading which encourages switching between various searchlight strategies, particularly when phonic work is regarded as only one such strategy, all of equal worth, risks paying insufficient attention to the critical skills of word recognition which must first be secured by beginner readers."¹⁰² He insisted that "when it was introduced in 1998, the searchlights model encapsulated what was considered to be 'best practice' in the teaching of reading"¹⁰³ – a dubious claim given the chaotic and haphazard beginnings of the NLS¹⁰⁴ and the evidence received by the Select Committee in 2005. The Rose Review noted that "there is much convincing evidence to show from the practice observed that, as generally understood, 'synthetic' phonics is the form of systematic phonic work that offers the vast majority of beginners the best route to becoming skilled readers."¹⁰⁵

98 Ibid p.17

99 Ibid p.21

100 Ibid p.28

101 DfES, *Independent Review of the teaching of early reading*, DfES, Nottingham, p.36

102 Ibid p.36

103 Ibid p.37

104 House of Commons Education and Skills Select Committee, *Teaching Children to Read*, TSO, London 2005, p.19

105 DfES, *Independent Review of the teaching of early reading*, DfES, Nottingham, p.19

As a result of the Rose Review, the Government was forced to accept that the PNS was out of date and a new Primary Framework was designed with synthetic phonics at its core.¹⁰⁶ Schools were also given a statutory duty to teach synthetic phonics for twenty minutes a day as part of the National Curriculum. Despite the availability of numerous existing synthetic phonics programmes the DCSF insisted on developing their own programme, 'Letters and Sounds',¹⁰⁷ which has been

criticised by experts as "over-prescriptive and ...[containing] far too many trivial teaching objectives."¹⁰⁸ Primary schools can, however, choose a different synthetic phonics package providing that it is included on the DCSF's list of alternative programmes that meet their own 'core criteria'.¹⁰⁹

This is a step in the right direction, in that it encourages primary schools to take some initiative in evaluating what programme

might be best for their pupils (though there have been almost no controls – certainly none based on evidence – so the quality of programmes on the list is very mixed). But the strategies continue to be delivered in a top-down hierarchical fashion, and it continues to be seen as a burden by many teachers. It is a sign of how ineffectual this centralised approach is that even though the new literacy framework is based on synthetic phonics, and this had immediate and dramatic effects in Clackmannanshire and West Dunbartonshire, the percentage of children achieving Level 4 in English only increased by 1% in 2008 and the percentage achieving Level 5 fell by 5%. As Jim Rose put it in a recent letter to the Secretary of State updating him on school's uptake of phonics: "independent monitoring of the early National Literacy Strategy...showed that centrally driven initiatives may make a good start but fail to spread and embed best practice because teachers' commitment to them wanes."¹¹⁰ We would argue this is inevitable whenever a programme is delivered centrally rather than due to the active choice of school leaders and their staff.

Numeracy falls behind literacy

At least the PNS approach to literacy has benefited from innovation elsewhere. The approach to numeracy remains stuck almost where it was ten years ago. In OFSTED's most recent report on the Primary National Strategies, it was found that "the quality of teaching and learning was weaker in mathematics than in English in primary and secondary schools".¹¹¹ This finding was supported by the National Audit Office (NAO), which conducted a wide-ranging review of the specific problems facing maths at primary and secondary level.¹¹² The NAO noted that the proportion of pupils progressing by two levels between KS1 and KS2 (expected of all pupils) was "consistently lower than the equivalent progress made in English"¹¹³ and as a result "in 2007, over 66,000 pupils were not moving on enough in mathematics by the end of primary school given their prior attainment."¹¹⁴ This was compounded by the gender gap in maths which saw boys' advantage over girls more than double since 2004 between KS1 and KS2, as well as attainment in most ethnic minority groups declining over the last three years¹¹⁵

“Much criticism has focused on whole-class teaching that can prevent brighter pupils from being academically stretched while simultaneously leaving less academic pupils behind”

106 DfES, *Primary Framework for Literacy and Mathematics*, DfES Publications, London 2006; *Phonics and early reading*, DCSF website, see nationalstrategies.standards.dcsf.gov.uk/node/19231?uc=force_uj

107 *Letters and Sounds*, DCSF website, see nationalstrategies.standards.dcsf.gov.uk/node/83200?uc=force_uj

108 Burkard T & Burkard H, *Every Child a Reader: An example of how top-down education reforms make matters worse*, Policy Exchange, London 2009, p.7

109 *How to choose an effective phonics product or resource: core criteria and guidance*, DCSF Phonics website, see www.standards.dfes.gov.uk/phonics/programmes/; DCSF Phonics, see www.standards.dfes.gov.uk/phonics/

110 Sir Jim Rose's letter to Ed Balls, see www.dcsf.gov.uk/pns/pnattach/20090016/1.doc

111 OFSTED, *Evaluation of the Primary and Secondary National Strategies 2005–07*, OFSTED Publications, London 2008, p.11

112 NAO, *Mathematics Performance in Primary Schools: Getting the Best Results*, TSO, London 2008

113 Ibid p.15

114 Ibid p.16

115 Ibid p.17

and the stubborn persistence of a 20-point gap between different socioeconomic groups.¹¹⁶

Much criticism has focused on the deliberate emphasis on whole-class teaching that can prevent brighter pupils from being academically stretched while simultaneously leaving less academic pupils behind. The focus on achieving Level 4 as the benchmark for success has exacerbated this problem: less attention has been paid to those who might achieve Level 5 with extra help or to students who have no chance of reaching Level 4, and less attention has been paid to younger children. As the NAO note “schools still tend to make the greatest use of resources to prepare pupils for the Key Stage 2 tests in Year 6.”¹¹⁷

A review of the numeracy hour by the Institute of Education in 2004 argued that “the intention that whole class teaching needs to be ‘interactive’ and promote higher quality dialogue, discussion and strategic thinking, has not been realised”.¹¹⁸ They went on to state: “the increased use of ‘traditional’ whole class teaching with ‘pace’ [demanded by the imposed structure of the numeracy lessons] is in fact undermining the development of a more reflective and strategic approach to thinking about mathematics, and may be creating problems for lower attaining pupils [and] there is evidence that the stricter time management involved may pose particular problems for lower attaining pupils.”¹¹⁹ They urged policy-makers to consider whether “whole class teaching with pace may be inculcating bad learning habits, and whether the needs of low attaining pupils are being well served by the NNS.”¹²⁰

Kings College London added to these anxieties when their research showed that “both observation of lessons ... and interviews with children suggest that low attaining pupils derive little benefit from the whole-class teaching episodes. ... Some high attainers also expressed to us their frustration at their progress being held back by the whole class teaching emphasis, which tends to be pitched at the needs of the middle of the group.”¹²¹ The authors of this report noted that since the NNS was introduced, “deep change within the lesson interactions is hard to identify ... [and] our observation data shows limited evidence of what the NNS has recommended in terms of the encouragement of strategic thinking. ... The NNS stresses the importance of pupils not only developing a ‘repertoire’ of mental and written calculation strategies from the earliest years but more importantly an ability to select between these according to the size of the numbers and the purposes of the calculation. We have not found an increase of teaching that would promote this strategic thinking.”¹²² The report found some encouragement from the extra support being given to teachers through the NNS, but they clearly felt that the changes resulting from the NNS were fairly superficial and that pupils’ understanding was not increasing to any great extent.

Not only is there concern amongst experts that whole-class teaching, in the context of mixed-ability classes, is damaging the brightest and least able pupils, it also seems to be directly contradicted by the Government’s endorsement of ‘personalised learning’.¹²³ Though this remains a fairly nebulous concept, it is supposedly the driving philosophy behind Jim Rose’s ongoing review of the primary curriculum. The Government has stepped up support for other programmes that emphasise differentiation between pupils including the ‘gifted and talented’ programme,¹²⁴ the creation of ‘Learning Mentors’ (part of the ‘Excellence in Cities’ initiative)¹²⁵ and 65 other publications on the DCSF website

116 Ibid p.18

117 Ibid p.25

118 Kyriacou C & Goulding M, A systematic review of the impact of the Daily Mathematics Lesson in enhancing pupil confidence and competence in early mathematics, EPPI-Centre (Institute of Education), London 2004, p.40

119 Ibid p.40

120 Ibid p.41

121 Brown M et al, “How has the National Numeracy Strategy affected attainment and teaching in Year 4?”, in Williams J (ed), *Proceedings of the British Society for Research into Learning Mathematics* 23(2), 2003, p.16

122 Ibid p.17

123 *Personalised Learning*, DCSF website, see nationalstrategies.standards.dcsf.gov.uk/personalisedlearning/about/

124 DfES, *Higher Standards, Better Schools For All*, TSO, Norwich 2005

125 *Learning Mentors*, DCSF website, see www.standards.dfes.gov.uk/learningmentors/

that relate to ‘inclusion’ of groups who are struggling to fulfil their potential.¹²⁶ As we shall see in the next chapter, much of the Government’s focus at the primary level over the past few years has been on supporting new interventions, often based on one-to-one tuition, to support struggling pupils. All of this seems in direct contradiction with the initial approach endorsed by the strategies. In 1998, the Government was arguing that whole-class teaching “allows for a controlled degree of differentiation, while holding the class together and avoiding a highly individualised approach to teaching. Individualised teaching spreads the ability range and often disadvantages the most and least able children [whereas] class teaching caters effectively for individual needs.”¹²⁷ It went on to say that whole-class teaching “benefits children who need help to access the curriculum, e.g. low attainers. ...Whole class work also benefits more able pupils.”

As we have seen, many of the key concepts that underpinned the initial strategies have effectively been repudiated by the same government that introduced them (though never explicitly). The problem is not, of course, that ideas about pedagogy change over time, but that as long as a government insists on supporting one centrally designed programme in the information and training they provide, innovation will be stifled. It is notable, for example, that synthetic phonics campaigners have had to rely on trials in Scotland to make their case. Furthermore, the process of delivering the strategies is so hierarchical that it disenfranchises school leaders and teachers. There can be no sense of ownership in a programme you have been told to deliver. In the next chapter, we will see how the Government are making exactly the same mistake in their latest string of interventions for children who are struggling to grasp basic skills.

126 Found by searching under the heading of ‘inclusion’ in the ‘Publications’ section of the DCSF website before it was redesigned at the end of 2009.

127 DfEE, *National Literacy Strategy: additional guidance*, HMSO, London 1998, p.96

2

Extra support programmes

As we saw in the last chapter, the initial primary literacy and numeracy strategies assumed that whole-class teaching would provide sufficient support for less able pupils. By 2001, however, the DfES had realised that too many children were failing to make much progress. Three ‘waves’ of support for children were mapped out as follows:

- WAVE 1: The effective inclusion of all pupils in a high quality, daily literacy hour and mathematics lesson (‘Quality First Teaching’)
- WAVE 2: Small group, low-cost intervention – for example, ‘booster classes’, ‘springboard programmes’ or other programmes linked to the National Strategies (e.g. Early Literacy Support)
- WAVE 3: Specific targeted intervention for pupils identified as requiring special educational needs support¹²⁸

This mapping exercise allowed the Government to weave new programmes into the National Strategies that were specifically aimed at pupils who were falling behind because the ‘Quality First Teaching’ in Wave 1 was not sufficient. The first major example of such a programme was ‘Early Literacy Support’ in 2001,¹²⁹ designed for children who had already fallen behind by the end of the first term in Year 1 (the start of primary school). Once a child had been identified as needing extra support, a teaching assistant would deliver additional 20-minute literacy sessions for a group of up to six children, each day for 12 weeks during the second term of Year 1. The sessions were based on key objectives from the NLS in the hope that as many of the children as possible could rejoin their peers by the last term of Year 1. To complement this support for Year 1 pupils, the ‘Additional Literacy Support’ programme was aimed at children in Year 3 who under-performed in their KS1 assessment and ‘Further Literacy Support’ offered similar assistance to those pupils working at Level 3 in Year 5 – one year before their SATs.

Pupils who fell behind in numeracy were also offered Wave 2 support in the form of ‘springboards’ – the first of which was ‘Springboard 5’ released in 2000.¹³⁰ In this programme, if children in Year 5 were thought capable of moving from Level 3 to Level 4 by the end of Year 6 (the end of primary school) after receiving additional support, they would be entered for ten extra lessons with the class teacher and ten follow-up sessions from a teaching assistant. Springboards 3, 4 and 6 (all introduced in 2001) used a similar methodology, with Springboard 6 designed for pupils in Year 6 who teachers believed could be pushed up to Level 4 by the time they took their SATs.

128 DfES, *Targeting support: managing NNS/NLS intervention programmes*, HMSO, London 2002, p.2

129 *Early Literacy Support: Flyers*, DCSF website, see nationalstrategies.standards.dcsf.gov.uk/primary/publications/literacy/63473/

130 *Springboard 5: Catch up programme for children in Year 5*, DCSF website, see nationalstrategies.standards.dcsf.gov.uk/primary/publications/mathematics/springboard_5/

Literacy and numeracy support have since been enhanced by ‘booster lessons’¹³¹ in both subjects, which focus on the last two years of primary school to push as many pupils as possible from Level 3 up to Level 4 by the end of Year 6. The Government also published ‘revision guidance’ for schools, aimed at pupils in Year 6¹³² and Year 9¹³³ before they take their SATs, with the same goal of making more students achieve the required level. Effectively there has been a concerted attempt to encourage schools to aim resources at those pupils who are just below Level 4 at the end of primary school so as to maximise the number of children achieving the minimum standard.

As improvements in SATs have stalled over the past few years, ministers have become increasingly desperate to find new ways to support children still failing to meet minimum standards. One of the most significant initiatives is the ‘Making Good Progress’ pilot, a package of measures designed to support children who “despite our best efforts...do not make adequate progress in our schools”.¹³⁴ Some of these measures relate to assessment and are discussed in Chapter 3 but they also include an offer of ten hours of one-to-one tuition for up to 10% of the KS2 and KS3 pupils included in the pilot schools struggling to reach their expected level. Alongside this pilot the Government are also rolling out a more intensive programme of interventions for children failing to reach the KS1 minimum standards at age seven. These interventions are to be funded under the ‘Every Child a Chance’ umbrella. The determination of the Government to roll-out yet more one-size-fits-all national programmes would suggest that they have not learnt any lessons from the relative failure of the National Strategies.

‘Making Good Progress’

The individual tuition component of the Making Good Progress pilots has proved very difficult to implement. Although 92% of headteachers involved in the pilot reported that the tuition in English and maths had started in their school, the percentage of pupils in pilot schools receiving the tuition in each subject was just 3% – well below the 10% Government target.¹³⁵ Of these pupils, almost 50% of them were in Year 6, which, of course, is the year that pupils take their SATs,¹³⁶ and is several years after literacy and numeracy problems tend to develop. The evaluation of the pilot explains that “many interviewees raised concerns around the sustainability and scalability of one-to-one tuition and the effects a national roll-out would have on their ability to find the required number of tutors.”¹³⁷ In fact, over 60% of the tutors were teachers in the pupils’ school, such was the difficulty in finding adequately trained external tutors.¹³⁸ Furthermore, “only a fifth of schools specifically track the progress of those pupils undertaking tuition”, so it is difficult to measure the effect of the tuition on performance.¹³⁹ From the data that was collected, modest improvements were found in reading and writing in KS2 and KS3 for pupils receiving tuition. In maths, though, the data suggested that pupil progression was actually inhibited by tuition in KS3¹⁴⁰ and the impact on pupil motivation was much stronger at primary level than at secondary.¹⁴¹

Alongside the tuition, a new ‘Progression Target’ and ‘Progression Premium’ are also being piloted. The first of these is a new target for schools measuring the proportion of pupils improving by at least two National Curriculum levels across each Key Stage.¹⁴² As with all arbitrary national targets this threatens to distort

131 Year 6 booster resources, DCSF website, see nationalstrategies.standards.dcsf.gov.uk/search/primary/results/nav%3A49600+facets%3A27908%2C24427

132 Year 6 Revision (Literacy), example of current revision guidance from DCSF, see nationalstrategies.standards.dcsf.gov.uk/node/19790

133 DfES, *Be Prepared: Your Year 9 tests revision guide*, DfES Publications, Nottingham 2004

134 <http://www.teachernet.gov.uk/teachingandlearning/school-standards/mgppilot>

135 PricewaterhouseCoopers, *Making Good Progress LLP, Evaluation of the Making Good Progress pilot: Interim report*, DCSF Publications, Nottingham 2008, p.77

136 Ibid p.78

137 Ibid p.83

138 Ibid p.83

139 Ibid p.89

140 Ibid p.90

141 Ibid p.95

142 Ibid p.100

schools' behaviour and draw attention away from those pupils who will meet it easily or who are certain to miss it. Half of headteachers interviewed for the pilot evaluation did not think that the Progression Targets had any impact on pupil achievement.¹⁴³ The 'Progression Premium' is an additional payment for schools that increase the proportion of their pupils who, having entered a Key Stage below the expected level, progress by two levels by the end of the Key Stage.¹⁴⁴ Teachers and school leaders expressed a number of concerns regarding this payment including the disadvantage that schools with high turnovers would face, and the use of a target that does not consider contextual factors such as the number of pupils with special educational needs.¹⁴⁵ 78% of headteachers did not think that the Premium played any role in producing higher rates of progression, only 17% of headteachers felt it had any positive influence on teaching and just 10% thought the Premium would help motivate their staff.¹⁴⁶

“ Despite these implementation problems and the lukewarm response from schools, the Government have budgeted £123 million for a national roll-out of Making Good Progress from September 2009 ”

Despite these implementation problems and the lukewarm response from schools, the Government have budgeted £123 million for a national roll-out of Making Good Progress from September 2009. It is highly questionable whether this is the best way to support struggling students, especially given that the tuition is unlikely to be available to more than a third of those who are experiencing problems. It is probable that schools, at least at primary level, will use the tutors they are able to find to provide intensive support to children in Year 6 who might achieve a Level 4 in their SATs. Results may therefore be boosted, but it is hardly a systematic strategy to tackle deep-rooted underperformance.

‘Every Child a Chance’

In 2005, the then Education Secretary Ruth Kelly decided to provide a small amount of financial backing (£5 million matched by charitable donations) for a three-year pilot of a programme called 'Every Child a Reader' (ECAR).¹⁴⁷ The pilot saw specialist Reading Recovery (RR) teachers sent to over 200 schools, mostly in inner city areas across 26 local authorities, to provide intensive literacy support for children failing to reach the minimum standard at KS1. RR is a programme that originated in New Zealand in the 1970s and has been used in several other English-speaking countries including Australia, America and Canada. For up to five months, pupils enrolled in RR receive 30 minutes of tuition daily from a specialist teacher to improve their reading and writing skills, with the aim of allowing the pupil to rejoin their class at the appropriate level.

Even though the pilot trials had not even finished, Gordon Brown announced the nationwide roll-out of ECAR in 2006 to give 30,000 pupils access to this extra support by 2010-11.¹⁴⁸ A year later Ed Balls, the Secretary of State for Education, announced further investment in 'Every Child Counts' (ECC) and 'Every Child A Writer' (ECAW) over three years to 2011 at a total cost of £144 million (since increased to £169 million).¹⁴⁹ The plan is to have almost 3,500 teachers trained as specialists in these interventions (despite having no actual idea of what Every

143 Ibid p.106

144 Ibid p.109

145 Ibid p.111

146 Ibid p.113

147 *Every Child A Reader*, see www.everychildareader.org/index.cfm

148 *Reading programme champion welcomes Chancellor's Pre-Budget statement*, Every Child A Reader website, 6th December 2006, see www.everychildareader.org/news/gordon_pr.cfm

149 *Action to Boost Early Reading, Writing and Maths Skills*, DCSF Press Release, 26th September 2007, see www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2007_0171

Child Counts or Every Child a Writer might entail when the announcement was made). In the summer of 2007, another programme called 'Every Child a Talker' costing a further £40 million was announced in response to a review which found that up to 50% of children in some areas were starting primary school unable to communicate properly.¹⁵⁰ Every Child a Reader and Every Child Counts are controlled by the Every Child a Chance Trust that introduced ECAR to Ruth Kelly. Every Child a Writer and Every Child Talks are separate Government-run programmes that will just use the same brand.

Even if the Government had waited for the pilot in ECAR to finish (or for the other three programmes to be invented) it would have provided little confidence since the only evaluations undertaken were by supporters of the Every Child a Chance Trust. The pilot was evaluated by the Institute of Education, who support the Reading Recovery National Network and provide training to reading recovery specialists.¹⁵¹ They published an initial report in 2006 and the final report in 2008. Alongside this the accountancy firm KPMG, who were providing funding for the initial pilot and whose Europe Chairman is also Chairman of the Every Child a Chance trust, produced a 'value-for-money' assessment in 2006.

Unsurprisingly all three evaluations showed impressive results. The Institute of Education found that after just one year, pupils who took part in RR had "on average gained 14 book levels, had gained 20 months on word reading age and could write 45 words spelt correctly [and] their class teachers assessed them as having made good progress during the year, in literacy, oracy, work habits, social skills and all learning related attitudes."¹⁵² This was in contrast with pupils who had not taken part, who "had made very little progress in learning and the gap between them and their age peers had widened considerably by the end of the year. This gap widened even more for boys than it did for girls in schools without RR [whereas] in schools with RR boys and girls did equally well."¹⁵³

When the Institute of Education returned to the same schools that taught RR a year after the programme had finished, they found that "the children who had received RR in Year 1 were achieving within or above their chronological age band on all measures and were still around a year ahead of the comparison children in schools where RR was not available. ...The gender gap that was noticeable amongst low attaining comparison children, with boys lagging behind girls, was not evident in RR schools, where there was no gender gap."¹⁵⁴ In addition, "the children who had received RR were able to write twice as many correctly spelled words as those children who were in the comparison group."¹⁵⁵ With regard to National Curriculum levels, more children from the RR programme were achieving Level 2+ and 2b+ at the end of Year 2 in primary school relative to the national average, and no RR pupils were still at Level 1 compared to 10% of the national cohort.

The KPMG assessments brought more good news for the supporters of the ECAR project in 2006. They estimated the cost of delivering the RR programme at £2,389 per child, including equipment, teacher time, staff training and local authority guidance. KPMG compared this with their estimates of how much low literacy levels cost us in terms of lower tax revenues, unemployment benefits, prisons, extra educational support and poorer health. In total, they calculated that each person who does not have basic literacy costs society between £44,797 and £53,098 by the age of 37.¹⁵⁶ On the assumption that RR lifts 79% of struggling

¹⁵⁰ Free Childcare for More Families – 10 Local Areas Announced as Pilots, DCSF Press Release, 9th July 2008, see www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2008_0146

¹⁵¹ Trainer details, Reading Recovery National Network, see www.ioe.ac.uk/schools/ecpe/readingrecovery/pages/contacts_trainers.html

¹⁵² Burroughs-Lange S, *Evaluation of Reading Recovery in London Schools: Every Child A Reader 2005-2006*, Institute of Education, London 2006, p.24

¹⁵³ Ibid p.24

¹⁵⁴ Burroughs-Lange S, *Comparison of Literacy Progress of Young Children in London Schools: A Reading Recovery Follow up Study*, Institute of Education, London 2008, p.3

¹⁵⁵ Ibid p.3

¹⁵⁶ KPMG Foundation, *The long term costs of literacy difficulties*, KPMG Foundation, London 2006, p.23

children out of literacy failure, the savings that the scheme makes for the public purse is somewhere between £1.37 and £1.62 billion – giving a spectacular return of £14.81-£17.56 for every pound spent on ECAR.¹⁵⁷

The KPMG report received considerable media attention due to its conclusions,¹⁵⁸ even though their calculations were verging on the bizarre in places (the direct link between literacy and obesity will no doubt come as a surprise to the scientific community). More importantly, KPMG failed to confine their analysis to the ECAR project. Even if one accepts the assumptions behind the £2 billion-a-year savings, their report suggests that any programme capable of improving literacy rates is worth pursuing – hardly a revelatory conclusion. In fact, if a cheaper programme was equally or more successful then that would represent a better investment.

The evidence provided by the Institute of Education also deserves greater scrutiny. The biggest problem is that the control group that the children receiving RR tuition were compared to received no extra help at all. Consequently the observed gap between the two groups simply shows the benefits of spending a hundred hours with a literacy specialist. It tells us nothing about how ECAR compares to other, perhaps less expensive, interventions. Furthermore the Institute of Education's literature review shows signs of bias. For example, they claim that RR "is one of nineteen interventions for which Brooks (2002) found evidence of substantial impact, with children making around four times the normal progress over the programme".¹⁵⁹ This is wholly disingenuous as they only reported the results after one year and omitted the data from the three-year follow-up – despite Brooks including the two results on the same page in his report. Brooks found, in a meta-analysis of 25 different interventions for those struggling with literacy, that "at the three-year follow-up, neither Reading Recovery nor the Phonological Intervention group [which is another intervention programme] was significantly better overall than their respective control groups."¹⁶⁰

In the same section of their report, the Institute of Education noted that "there is follow up research on the sustainability of gains made in Reading Recovery (Moore & Wade, 1998; Schmitt & Gregory, 2001; Fraser et al., 2001; Briggs & Young, 2003)."¹⁶¹ Encouraging as this might sound, the findings from these studies were somewhat more nuanced. Both the Moore & Wade and Schmitt & Gregory studies used a 'no intervention' control group like the Institute of Education, while Fraser et al. found that 12 months after completing the RR programme 40% of pupils had lost at least a quarter of the gains made, and Briggs & Young found that pupils who had completed the RR programme were working close to the mean of their peers but had not caught up completely.¹⁶²

Alongside the Institute of Education evaluations, the ECAR website presents an array of supportive studies from other countries.¹⁶³ While many of these studies show impressive results for reading recovery, again, typically the control group received no extra support at all. Even where studies were compared against another intervention, they were often just being compared against a modified version of RR which tells us nothing about how it compares to intervention programmes from other organisations. For example, a study by Dorn and Allen compared trained RR teachers working with individuals against trained RR teachers delivering the programme to a group of children and, unsurprisingly, they

157 Ibid p.23

158 Reading Scheme 'saves' taxpayer, BBC News, 11th December 2006, see news.bbc.co.uk/1/hi/education/6161925.stm

159 Burroughs-Lange S, *Evaluation of Reading Recovery in London Schools: Every Child A Reader 2005-2006*, Institute of Education, London 2006, p.3

160 Brooks G, *What Works For Children With Literacy Difficulties?*, DFES Publications, Nottingham 2002, p.40

161 Burroughs-Lange, S, *Evaluation of Reading Recovery in London Schools: Every Child A Reader 2005-2006*, Institute of Education, London 2006, p.3

162 *Research on Reading Recovery* on the Every Child A Reader website contains brief descriptions of each study, see www.everychildareader.org/pubs/nov_2006_new_Research.doc

163 Ibid

found that 76% of children taught individually reached the average level of performance for their age versus 30% of those taught in a group.¹⁶⁴

There is barely any evidence contained in the ECAR's own review of academic studies that compares children participating in RR against another type of intervention with positive results. On the few occasions where such a comparison has been made, RR has not fared well. For example, research carried out in Chicago looked at which intervention programmes were cost-effective for children in deprived parts of the city. By assessing the long-term cost-benefit ratios i.e. the money invested in the programmes versus savings made through fewer pupils

requiring special education, ending up in prison or having mental health problems later on, the best programmes were pre-school (age 3-5) interventions with a return of over \$6 for every \$1 invested. For every dollar invested in RR, the return was just \$0.30.¹⁶⁵ Another problem with much of the international evidence in support of RR (but not included in the Institute of Education evaluations) is that performance results are based on assessments from the same teachers that delivered the RR programme. In their evaluation of

RR, Tunmer and Chapman referred to a 2001 study that found "the mean book level [which measures achievement in reading] reported by Reading Recovery teachers for the children completing the program was 16.6, whereas the classroom teachers reported a mean book level of only 9.0 for the same children, a dramatic difference."¹⁶⁶ The authors' explanation of this phenomenon was clear enough: "Because those who have a vested interest in the success of Reading Recovery collect and collate data from the children participating in the program, systematic bias may be introduced into the assessment process when a measure as unreliable as reading book level is used."¹⁶⁷

In short, there is very little evidence (if any) that supports the widespread implementation of RR as part of the ECAR project, to the exclusion of other programmes, and none from a UK-based evaluation. Furthermore, the Government appears to have ignored the conflict between their unreserved support for RR and the Rose Review recommendation that synthetic phonics should provide the backbone of literacy teaching. RR was developed well before synthetic phonics was established as the most productive way to teach reading. This has been acknowledged by the charity behind ECAR. In their first-year evaluation of the ECAR project they insisted that they were "using the opportunity presented by international changes to Reading Recovery's methodology in its revised core texts to take a fresh look at the role of synthetic phonics in the scheme, ensuring consistency with the developments underway as a consequence of the Government's Rose Review of the teaching of early reading."¹⁶⁸ As yet, though, neither the creators nor deliverers of RR have publicly committed themselves to move further towards synthetic phonics. This represents a glaring contradiction at the heart of the Government's policy on basic skills.

At least with ECAR, there was a developed programme ready to use, even if the evidence base was shakier than acknowledged. The Government's commitment to

“ It is little more than common sense that children who received extra support for at least three days a week for several weeks in a row from a trained numeracy specialist would show significant gains in their performance ”

164 Dorn L & Allen A, "Helping low-achieving first-grade readers: A programme combining Reading Recovery tutoring and small-group instruction", *ETRS Spectrum: Journal of School Research and Information*, 13(3), p.16-24, 1995. Cited on the ECAR website.

165 *Addressing Achievement Gaps: School Finance and the Achievement Gap: Funding Programs That Work*, ETS Policy Notes, see 'Research' section of www.ets.org

166 Tunmer WE & Chapman JW, *The Reading Recovery Approach To Preventive Early Intervention: As Good as it Gets?*, Department of Learning and Teaching, Massey University 2001, p.16

167 Ibid p.16

168 *Every Child A Reader, the results of the first year...*, KPMG Foundation, London 2006, p.10

Every Child Counts (ECC) and Every Child a Writer is based on nothing at all – in the latter case the Every Child a Chance Trust were not even prepared to develop the programme. Programmes have had to be developed *after* the commitment was made to introduce them and both are still being trialled with the aim of rolling them out across the country in 2010/11^{169, 170} (although ECC is at a more advanced trial stage). Worryingly, the evidence base for ECC is even thinner than for ECAR. The trial evaluation released in the summer of 2008 again failed to include a comparison with any other kind of intervention. It is little more than common sense that children who received extra support for at least three days a week for several weeks in a row from a trained numeracy specialist would show significant gains in their performance on various tests, and this precisely what happened.¹⁷¹ But, as with the RR research, this does not demonstrate the superiority of ECC over any other programme nor does it tell us anything about the costs or benefits of the programme.

The ECC programme currently being trialled is based on two components – ‘Maths Recovery’ and ‘Numeracy Recovery’ (the latter being funded by a sponsor of ECAR). Both are designed for 6 and 7-year-olds, albeit with more emphasis on the younger cohort.¹⁷² According to the Government’s own report on these interventions, only one assessment has been made of each programme prior to their adoption within ECC (conducted by the creator of the programmes in both cases) and the scarce evaluations of Mathematics Recovery have not even used standardised tests for measuring the pupil outcomes, making the data almost worthless.¹⁷³ In addition, there is no international evidence for advocates to use in support of their case. The Math Recovery Council in the USA only lists two supporting studies on its website,¹⁷⁴ one of which – an unpublished university dissertation – found only that “Mathematics Recovery significantly changes teacher practice in the classroom” without reporting any data on pupil outcomes.¹⁷⁵

The report on the first term of the ECC pilot¹⁷⁶ (written by the creators of the programme) was guilty of precisely the same mistakes as ECAR when it came to research credibility. The report’s authors proudly proclaimed that “children made four times the normal rate of progress in the first term of Numbers Count”,¹⁷⁷ which is absolutely true. However, what the authors failed to mention was that there was no control group to compare the pupils against. In short, no attempt was made to identify the specific effects of ECC. The fact that children who received approximately 40 one-to-one lessons lasting 30 minutes each over a 13-week period courtesy of a trained maths teacher showed considerable improvements in their numeracy is hardly newsworthy. Without having a control group who received the same quantity of individual tuition in the absence of ECC, we have no way of knowing how effective the programme really is. It is encouraging that the Institute for Effective Education at York University are now conducting a proper randomised control trial of ECC, but with the Government already committed they are unlikely to change course regardless of the results.

Other Support Programmes

The Government’s mistake in backing just one horse becomes even more apparent when one considers the array of alternatives available, many of which seem more promising in cost/benefit terms. One of the key problems with the Government’s

169 Hansard, 15th January 2009, Column 924W

170 *Action to boost early writing, reading and maths skills*, DCSF Press Release, 26th September 2007, see www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2007_0171

171 Report on research phase of Every Child Counts, Every Child A Chance Trust 2008, see www.everychildachancetrust.org/pubs/Results_5_LAs_Summer_term%202008.doc

172 Dowker A, *What Works For Children With Mathematical Difficulties?*, DfES Publications, Nottingham 2004, p.35

173 Ibid p.37

174 *Research Overview*, US Math Recovery Council, see www.mathrecovery.com/about/research-overview

175 Williams LAG, *The influences of participation in a Mathematics Recovery program on classroom practices*, unpublished Doctor of Education dissertation, University of Virginia, Charlottesville 2004. Cited on www.mathrecovery.com/about/research-overview

176 Every Child Counts team, *Numbers Count: First term report for all schools – September 2008 to January 2009*, Edge Hill University, Lancashire 2009

177 *Every Child Counts*, Edge Hill University, see www.edgehill.ac.uk/everychildcounts/

rigid approach is that children can only be entered for ECAR/ECC, or later for Making Good Progress tuition, if both Wave 1 and Wave 2 interventions have proved inadequate – meaning that schools have to use two or three different programmes. The majority of children in most schools will still be taught literacy and numeracy through the PNS as there is no funding or information available about alternatives. Those who fall through the net are then eligible for ECAR/ECC or ten hours of tuition, although nowhere near enough resources have been made available for all eligible children to actually receive these interventions. This process assumes that a substantial number of children will inevitably fall through the net in the first place, yet trials of other literacy and numeracy programmes suggest that if the initial teaching is done right this is far from inevitable. A more holistic programme that works for all children but provides extra support for those struggling is likely to be much more cost effective.

One such alternative for literacy is ‘Success For All’ (SFA), designed in Baltimore, USA in 1987 and now found in Australia, Israel, Canada, Mexico and the UK as well as being used in almost every US state.¹⁷⁸ What makes SFA unusual is that, even though it is essentially a programme for literacy, it introduces reforms into many aspects of school life such as Family Support Teams (who closely work with parents), extensive training and professional development for teachers and a full-time Programme Facilitator who manages SFA throughout the school. All pupils are grouped by ability for reading lessons, regardless of their age, and on the basis of assessments every eight weeks these groups can change. Synthetic phonics is the major component of the SFA curriculum, although cooperative learning between pupils is also important. In addition, SFA emphasises early and intensive intervention to address learning difficulties as soon as possible, meaning that one-to-one tutoring is used instead of additional classes. In terms of design, there are several key differences between SFA and the NLS. The extent of synthetic phonics within the NLS is still subject to debate whereas synthetic phonics is a central theme within SFA. Cooperative learning and the inclusion of parents in the school reading programme act as important support strategies and, crucially, SFA groups pupils by ability rather than age, avoiding the numerous problems of mixed ability teaching.

Aside from the unique programme design, SFA has also been subjected to academic research including large-scale comparisons with other competing projects. One of the best examples of this is a collection of five independent reviews that compared SFA to other reading intervention programmes.¹⁷⁹ Not only was SFA ranked top and awarded the highest rating for effectiveness in every single comparison, it also had the largest number of supporting studies that met each review’s admissibility criteria (in one review, SFA had three times more studies rated as ‘conclusive’ than any other programme).¹⁸⁰ The only independent review to cover both SFA and RR found the former to be more effective.¹⁸¹

Due to its whole-school reform model, SFA is not cheap. The Programme Facilitator only teaches 50% of a normal timetable to allow them to oversee SFA in every year group and the additional personnel (e.g. Family Support Teams, teaching assistants) come at a price. However, the success of the programme in improving literacy throughout the school means that the cost of SFA is the same as that incurred in regular schooling.¹⁸² Because SFA directs more resources at pupils who fall behind (as does the NLS), low-achieving students consume a

178 Slavin RS et al, *Success for All in England: Implementation and Outcomes of a Comprehensive Literacy Reform for Primary Schools*, Success For All UK, Nottingham 2005, p.1

179 Success For All, *Independent Reviews: Support Achievement Effects of Success for All*, Success For All Foundation, Baltimore 2006

180 Ibid pp.2-6

181 Ibid p.4

182 Borman G & Hewes G, “The long-term effects and cost-effectiveness of Success for All”, *Educational Evaluation and Policy Analysis*, 24 (4), 243-266, 2002, cited on Success For All Foundation website.

higher proportion of the resources. Nonetheless, the preventative approach of SFA results in fewer pupils being placed in ‘special education’ classes thanks to an emphasis on early identification and targeted support. As a consequence of this, SFA costs over \$2,600 (£1,850) less for low-achieving pupils than standard education practices.¹⁸³

Research carried out in the UK largely echoes the findings from research in the USA.¹⁸⁴ Hopkins et al investigated five schools in Nottingham who were among the first in the country to introduce SFA. They found that pupils in Years 1-5 all exceeded expectations in literacy improvements while positive changes in variables such as behaviour, motivation and attitudes were also recorded. Peter Tymms from Durham University, along with Christine Merrell, evaluated primary and junior schools and noted that SFA had a positive effect on reading in Years 1 and 2 but had mixed effects in other year groups. Russ and Harris conducted a one-year investigation of four SFA schools (two in London, two in Leeds). Their conclusions included teachers feeling that SFA offers a “whole book” approach to teaching literacy, unlike the NLS, and the strong behavioural component of SFA was seen as an important feature of the programme. Encouragingly, SFA was viewed as being a high quality training programme which had made a difference to literacy levels as all four schools showed significant improvements in SAT levels. A separate evaluation of KS2 SAT pass rates was carried out for the schools that had used SFA from Autumn 2001 onwards and found that SFA schools improved their pass rates by 13.4%, compared to a national gain of just 3% over a three-year period.

A similarly holistic approach was adopted by the designers of the West Dunbartonshire study discussed in the previous chapter. Alongside the introduction of synthetic phonics to all schools, additional support through the ‘Toe By Toe’ programme was offered to children who were still struggling with their reading. 24 secondary school pupils who needed extra reading support were split into two groups for the initial study that compared ‘normal learning support’ (two one-hour sessions, one to develop comprehension and punctuation skills and the other dedicated to phonics, plus individualised spelling and paired reading programmes within their usual English class) against the ‘Toe By Toe’ intervention (individual tuition for 20 minutes a day over three months). 104 pupils who were experiencing significant reading difficulties at the end of primary school took part in the second phase of the ‘Toe by Toe’ intervention study, with the final phase covering secondary schools pupils who had not yet gained functional literacy.

The results were very positive. The 12 secondary schools pupils who received ‘Toe By Toe’ in the initial phase of the study showed a rise in reading age of two years over a 12-month period, even though the intervention only lasted for three months. During the same period, the 12 pupils given ‘normal learning support’ only improved by four months.¹⁸⁵ After the 104 pupils received additional support for six months in the second phase of the study, their reading age rose by an average of 14 months. As with any study of this magnitude, there was an element of variation in their performance. Nevertheless, the success of this holistic approach was clearly illustrated by the fact that in 2007, only three pupils left any secondary school in the whole of West Dunbartonshire without achieving functional literacy.

183 Ibid

184 Slavin RS et al, *Success for All in England: Implementation and Outcomes of a Comprehensive Literacy Reform for Primary Schools*, Success For All UK, Nottingham 2005, pp.10-14

185 Mackay T, *Achieving the Vision: The Final Research Report of the West Dunbartonshire Literacy Initiative*, West Dunbartonshire Council, Dunbarton 2007, p.31

The cost-effectiveness of the West Dunbartonshire programme is equally encouraging. If the annual budget of £300,000¹⁸⁶ is divided by the number of children in the first two years of primary school who received the 10-strand intervention programme, the cost per pupil is just £93 a year. Seeing as the programme actually covered nursery, primary and secondary interventions, it is arguable that the cost-effectiveness should be judged by dividing the budget by the total number of children in schools across the local authority – giving a per pupil cost of £13 a year to eliminate illiteracy. Although the interventions for struggling pupils were expensive, only a small number needed them, reducing the overall cost. Costs were further reduced because only one training session was needed before staff could deliver the West Dunbartonshire, interventions whereas ECAR requires specialist teachers to be trained at a cost of thousands of pounds. As the authors of the report argued, if the study achieved any of its goals “of higher self-esteem, lower disruption in schools, better school ethos, better staff morale, economic savings in remedial support, lower crime, a more skilled workforce and a stronger economy ...then in cost-benefit terms the expenses of running the project represented a modest investment indeed.”¹⁸⁷ The fact that the second poorest council area in the whole of Scotland decided to fund this entire project after the initial research funding for this enormous longitudinal study ran out¹⁸⁸ speaks volumes about the impact that the programme had.

Even though there are far fewer numeracy interventions available because we know less about ‘what works’ than we do with literacy, at least one programme for maths does have an evidence base. The ‘Everyday Mathematics’ programme¹⁸⁹ has existed for over 20 years and is used with 2.8 million pupils in America. For the equivalent of our primary school years, the Everyday Mathematics curriculum is broken into units comprising of 7-14 lessons on topics such as numeration, functions, sequences, algebra, geometry, measurement and patterns, with the number of units varying slightly for different year groups. The focus is on real-life problem solving, communicating mathematical thinking and using technology when appropriate as well as encouraging parental involvement. The emphasis on pupils verbalising their thoughts and methods is a particularly distinctive feature of the programme.

Like SFA and the West Dunbartonshire trials, Everyday Mathematics is constructed in such a way that pupils of all abilities are catered for. The programme combines whole-class teaching, small group work, partner activities and individual study as well as using a combination of written and oral tasks, mental arithmetic, flash cards, review activities, homework, timed tests and games. Activities can flow into the following lesson whenever necessary, mixed-age classrooms are commonly used and teachers are actively encouraged to adapt the resources to suit individual needs. What’s more, the manual for delivering ‘Everyday Mathematics’ ensures that children grapple with the same concepts in many different ways, meaning that not every child has to get the correct answer first time round. To deliver the programme, a school only has to purchase the resource package costing just over \$230 (approximately £160) that includes lesson guides, reference manuals, the Assessment Handbook, the Differentiation Handbook, a ‘Home Connection’ handbook and pupil resources.

Of course, none of this means that the Government should drop all existing programmes and switch to focusing entirely on SFA, the West Dunbartonshire

186 Ibid p.45

187 Ibid p.46

188 Ibid p.46

189 *Everyday Mathematics*, University of Chicago, see everyday-math.uchicago.edu/

model or Everyday Mathematics. Indeed, there are only a handful of carefully designed studies that support Everyday Mathematics and all of them use different measures to gauge the progress made by pupils, including one study that used a brand new test (developed by Everyday Mathematics researchers) to assess pupil achievement without any evidence demonstrating its validity in educational research.¹⁹⁰ The key point is there are lots of potential ways to improve literacy and numeracy standards and new ideas are being developed all the time. Moreover, some models work better in some areas or for some children more than others. No one questions the importance of intervening early when children are struggling with basic skills, or that resources should be made available to help schools target these problems. However, by focusing entirely on a small group of (often contradictory) interventions, the Government are stifling innovation and wasting money. In Chapter 4, we look at ways to give schools greater freedom and initiative while encouraging them to take up programmes that are proven to work.

190 *Intervention: Everyday Mathematics (Technical Appendices)*, What Works Clearinghouse, see ies.ed.gov/ncee/wwc/reports/elementary_math/eday_math/research.asp

3

Primary assessment and testing

Although discussion of the National Strategies and SATs often go hand-in-hand, the two are separate entities. SATs were introduced for Key Stages 1, 2 and 3 in the early 1990s, several years before the National Strategies came into being. The National Strategies are in essence a set of instructions for how to teach the National Curriculum, whereas SATs assess what has been learnt over the course of two or three years, regardless of whether the National Strategies existed or not. Having said this, over recent years the system of assessing pupil progress has become closely entwined with what happens in the classroom. Ever since the introduction of league tables, accountability for primary schools has been heavily weighted towards achievement in the SATs at the end of KS2. Inevitably, teachers began to focus more on teaching what was required for the test.

Key Stage 1

Even though KS1 (ages 5-7) rarely makes the headlines, it has undergone several notable changes since the national assessment structure was developed in 1991.¹⁹¹ Originally, performance at KS1 was assessed through reading aloud, an optional comprehension test in English and worksheet-based assessment in maths and science supplemented by teacher assessments. The first significant changes were in 1994, when science tests were abandoned in favour of relying solely on teacher assessments. In 1996, it was decided to allow teacher assessments to begin as early as January to iron out the major workload peak that teachers were experiencing in the summer, although the written tests were left in May. However, the issue of workload arose again in 1998 as the English comprehension test was made compulsory and in 2003 the burden on teachers was again increased through the introduction of a compulsory spelling test, a handwriting test and a longer writing task. The single biggest overhaul came in 2004 when the Government announced that teacher assessments should be the focus of KS1 assessment and test performance would no longer be reported to parents.¹⁹² Teachers must now award National Curriculum levels in the following areas:

- Reading
- Writing
- Speaking and listening
- Mathematics
- Science

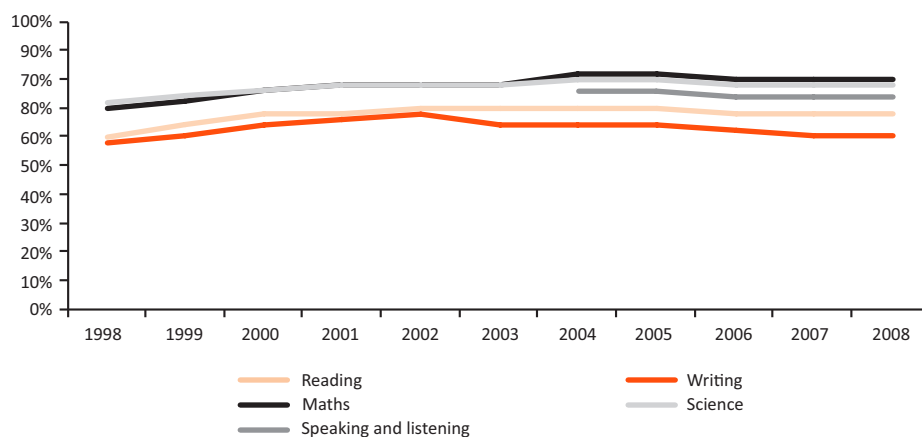
¹⁹¹ Shorrocks-Taylor D et al, *Evaluation of the trial assessment arrangements for key stage 1*, University of Leeds / QCA, p.2

¹⁹² *Key Stage 1 assessments*, ePolitix, 14th September 2004, see www.epolitix.com/briefings/article-detail/newsarticle/key-stage-1-assessments/

As described in Chapter 1, pupils are expected to reach Level 2 on the ten-point achievement scale for the National Curriculum, although this includes pupils achieving Level 2(c) which is essentially the lower end of Level 2 attainment. In reading, writing and maths, the level given to a pupil is determined by a combination of tasks and tests set by the teacher. Reading and writing are given separate levels and maths is given an overall subject level (albeit with more than half of their overall level being determined by the pupils' performance in the 'Number' section of the course). Levels for 'speaking and listening' and science (which is weighted more heavily towards 'Scientific Enquiry') are awarded solely on the work that a pupil produces over time and in different contexts within the subject.¹⁹³ Due to the large quantity of information collected on each pupil, there will occasionally be discrepancies between the teacher assessments and test or task scores. In such circumstances, teachers are expected to exercise professional judgement.¹⁹⁴ Local authorities moderate the levels awarded by teachers to ensure that the standards of assessment remain constant. That is not to say that authorities declare what the 'right' or 'wrong' level is for each child, but rather that they confirm schools understand the national assessment standards and apply them consistently. Other duties of local authorities include offering training and advice on KS1 assessment as well as collecting KS1 assessment data and submitting it to the DCSF.

With regard to pupil performance at the end of KS1, the picture is not encouraging. Figure 9¹⁹⁵ shows that, following a moderate increase in the late 1990s, the percentage of pupils reaching the expected level of achievement at age 7 has since fallen in every subject tested nationally. In 2004, the testing arrangements were altered so that pupil performance was only measured by teacher assessment instead of using a combination of a test and a task. As can be seen in Figure 9, 2004 is also the point at which the percentage of pupils reaching Level 2 began to fall. The fact that the percentage of pupils reaching the expected level has fallen ever since the written test was removed from the assessment regime raises concerns about the quality and credibility of written examinations used in primary schools.

Figure 9: Percentage of pupils achieving Level 2 by the end of the Key Stage 1 (age 7)



193 NAA, *Building a picture of what children can do*, NAA, London 2004, p.8

194 Ibid p.9

195 Data combined from (i) *National Curriculum Assessments at Key Stage 1 in England, 2008 (Provisional)* (ii) *National Curriculum Assessments of 7 year olds in England, 2005 (Provisional)* (iii) *National Curriculum Assessments of 7 year olds in England, 2005 (Provisional)* (iv) *National Curriculum Assessments of 7, 11 and 14 Year Olds in England – 2000*, see www.dcsf.gov.uk/cgi-bin/rsgateway/search.pl?cat=1&subcat=1_2_4&q1=Search

The failure to close the gender gap at KS1 over the last ten years is similarly disappointing.¹⁹⁶ Boys remain 8% behind girls in reading and 11% in writing. In maths the gap has fallen by just 1% to 3% and in science the gap has widened from 2% to 3%. While these may not sound like significant differences, the continuing existence of a gender disparity after ten years of reforms is regrettable.

Key Stage 2

The majority of interest at KS2 (ages 7-11) is focused on the SATs taken at the end of Year 6 - the end of primary school – although teachers have the option of using optional tests in English, maths and science in Years 3, 4 and 5 if they wish. The Year 6 SATs comprise of tests in English, maths and science that are taken over one week in May. The subject tests are structured as follows:¹⁹⁷

English

- Writing: a 65-minute test consisting of a longer task (28 marks), a shorter task (12 marks) and an assessment of handwriting (3 marks)
 - Spelling: a 10-minute 20-item test (7 marks)
 - Reading: 45-minute test that includes stories, poems, explanations, interviews and accounts (50 marks)
- TOTAL OF 100 MARKS

Maths

- Test A: 45-minute non-calculator paper (40 marks)
 - Test B: 45-minute calculator paper (40 marks)
 - Mental mathematics: a 20-minute 20-question test (20 marks)
- TOTAL OF 100 MARKS

Science

- Test A: 45-minute test (40 marks)
 - Test B: 45-minute test (40 marks)
- TOTAL OF 80 MARKS

Teacher assessment results are reported along with the test scores to provide a full account of a pupil's achievement, the idea being that teacher assessments take into account performance in areas such as class discussions and scientific practical skills. Once the tests and teacher assessments have been completed, the separate reading and writing test levels are combined into an overall English level and similarly the maths and science tests are combined to give a definitive level for every pupil.

Why do we have National Curriculum tests?

Kenneth Baker introduced the national testing system for children at age 7, 11 and 14 in the 1990s because there were no “objective and consistent performance measures which gave the public confidence about expected standards in primary schools or the intermediary years”¹⁹⁸ in place beforehand. At the time, the Education Select Committee consulted a wide range of education experts,

¹⁹⁶ Data combined from (i) *National Curriculum Assessments at Key Stage 1 in England, 2008 (Provisional)* (ii) *National Curriculum Assessments of 7 year olds in England, 2005 (Provisional)* (iii) *National Curriculum Assessments of 7 year olds in England, 2005 (Provisional)* (iv) *National Curriculum Assessments of 7, 11 and 14 Year Olds in England – 2000*, see www.dcsf.gov.uk/cgi-bin/rsgateway/search.pl?cat=1&subcat=1_2_4&q1=Search

¹⁹⁷ *The National Curriculum Tests and Tasks*, QCA, see www.qca.org.uk/libraryAssets/media/12820_student_test_guide_2005.pdf

¹⁹⁸ House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.10

government ministers and officials (both past and present), teaching unions, exam boards and several other groups and did not encounter any great concern about the need for some form of national testing. It was widely accepted that some kind of mechanism was needed to hold teachers and schools to account and to ensure equal access to education across the country. The Committee declared that “the weight of evidence in favour of the need for a system of national testing is persuasive [because] appropriate testing can help to ensure that teachers focus on achievement and often that has meant excellent teaching, which is very welcome.”¹⁹⁹ In addition, there was general agreement that national assessment regimes promote confidence in standards, help parents understand school performance and are useful for gauging the success of government policies.²⁰⁰

The question, however, of what the tests should be used for was more problematic. The Committee cited the TGAT (Task Group on Assessment and Testing) report²⁰¹ that accompanied the creation of the National Curriculum, which devised four broad possible objectives of assessment: formative uses (assessment for learning), summative uses (assessment of learning), evaluative uses (assessment for accountability) and diagnostic uses (assessment for special intervention). The Committee went on to list the 22 specific uses that assessment can be put to from one or more of these broader categories.²⁰² Trying to cover all of these uses with one solitary test was always going to be difficult. The problem has got worse over the past twenty years as the education system has become increasingly centralised and test scores have been put to more and more different uses. In 2008 the Children, Schools and Families Select Committee conducted another enquiry into testing and the Government admitted to the Committee that SAT scores are used for the following general purposes:²⁰³

“The problem has got worse over the past twenty years as the education system has become increasingly centralised and test scores have been put to more and more different uses”

- Developing government policy using national performance data
- Allocating resources based on national performance data
- Assisting schools to devise their own improvement strategies
- Local authority target-setting
- Identifying areas of under-performance within local authorities
- Providing the basis for inspections
- Guiding interventions from School Improvement Partners
- Informing parental decisions about education
- Measuring children’s progress through objective and reliable tests
- Supporting a personalised approach to learning

The Government’s own curriculum and assessment quango, the QCA, noted in their evidence to the Committee that the primary purpose of SATs is “to decide the level that a child has reached at the end of a Key Stage” and that while “it would be absurd to have 22 different sorts of tests in our schools...one serving 14 purposes is stretching it too far. When you put all of these functions on one test, there is the risk that you do not perform any of those functions as perfectly

199 Ibid p.13

200 Ibid p.13

201 DES, *Task Group on Assessment and Testing: A Report*, HMSO, London 1988. Cited in House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.15

202 House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.16

203 Ibid p.14

as you might”²⁰⁴ – a view supported by the General Teaching Council (GTC) and the National Union of Teachers (NUT). The Committee summarised the evidence:

“...national tests do not serve all of the purposes for which they are, in fact used. ...In addition, the data derived from the testing system do not necessarily provide an accurate or complete picture of the performance of schools and teachers, yet they are relied upon by the Government, the QCA and Ofsted to make important decisions affecting the education system” (p.20)

The reliability and validity of SATs provoked an equally negative response. Having spoken to the National Foundation for Educational Research (NFER) and assessment experts such as Professors Paul Black (Kings College London), John Gardner (Queens University, Belfast) and Dylan William (Institute of Education), the Committee concluded that:

“...the over-emphasis on the importance of national tests ...has resulted in teachers narrowing their focus. Teachers who feel compelled to focus on that part of the curriculum which is likely to be tested may feel less able to use the full range of their creative abilities in the classroom and find it more difficult to explore the curriculum in an interesting and motivational way. We are concerned that the professional abilities of teachers are, therefore, under-used and that some children may suffer as a result of a limited educational diet focused on testing.” (p.25)

The Committee endorsed the view of the vast majority of enquiry witnesses that “the data presented in performance tables gives only a very limited picture of the work which goes on in a school [and] it is, therefore, never appropriate to rely on this information alone when forming a judgment about a school’s overall performance.”²⁰⁵ The Government typically counter this argument by citing the publication of Contextual Value Added (CVA) scores alongside league tables of examination performance that are intended to present a relative measure of school performance compared to other schools with similar pupil intakes. What became clear from the evidence presented to the Committee was that most educationalists, let alone parents, do not understand CVA and were critical of the Government’s suggestion “that the meaning of CVA scores, as they are presented in the Department’s own performance tables, is by any means obvious.”²⁰⁶ They also critiqued the statistical assumptions that underpin CVA.

As the Committee pointed out, “much of the criticism directed at national tests actually derives from the distortions created by performance targets”²⁰⁷ and went to state:

“We are concerned that the Government’s target-based system may actually be contributing to the problems of some children. We believe that the system is now out of balance in the sense that the drive to meet government-set targets has too often become the goal rather than the means to the end of providing the best possible education for all children. This is demonstrated in phenomena such as teaching to the test, narrowing the curriculum and focusing disproportionate resources on borderline pupils. ... The priority should be a system which gives teachers, parents and children accurate information about children’s progress.” (p.33)

204 Ibid p.18

205 Ibid p.35

206 Ibid p.37

207 Ibid p.30

And they concluded that:

“...it is entirely possible to improve test scores through mechanisms such as teaching to the test, narrowing the curriculum and concentrating effort and resources on borderline students. It follows that this apparent improvement may not always be evidence of an underlying enhancement of learning and understanding in pupils. We consider that the measurement of standards across the full curriculum is virtually impossible under the current testing regime because national tests measure only a small sample of pupils’ achievements; and because teaching to the test means that pupils may not retain, or may not even possess in the first place, the skills which are supposedly evidenced by their test results.” (p.58)

The Select Committee are not the only group to condemn ‘teaching to the test’. In their report on maths teaching in 2008, OFSTED acknowledged the enormous scale of the problem. They remarked that “the rising trends in attainment are not generally being matched by identifiable improvements in pupils’ understanding of mathematics or in the quality of teaching. Instead, the evidence suggests that much is due to the increased level of intervention with underachieving pupils and those on key borderlines of performance, coupled with teaching that focuses on the skills required by examination questions and extensive use of revision.”²⁰⁸ This pattern was most evident in primary schools through the use of extra interventions, booster lessons and revision classes. OFSTED believe that “these [techniques] and teaching that focuses on the tests, often have a narrowing effect on pupils’ experiences of mathematics in Year 6, at the expense of strengthening their understanding of underpinning concepts.”²⁰⁹

The steady stream of protest against the compulsory testing arrangements for KS2 and KS3 had a negligible impact on the direction of central policy before 2008. It seemed that the Government would not be deflected from their current course by anything less than a fiasco of epic proportions. This was duly delivered by the SATs marking disaster in the summer of 2008. Rumours of administrative problems with the KS2 SATs first emerged in May 2008, when markers were reporting that their contracts were being changed, they were not told where their moderation meetings were taking place and they were having difficulties with the new computer system for entering results.²¹⁰ Seeing as ETS Europe (a subsidiary of ETS, an American non-profit testing company) were running the SATs marking process for the first time, teething problems were expected. Unfortunately, once problems began to emerge with the KS3 SATs, the markers began to quit. Within a matter of weeks, ETS were engulfed: inaccurate markers were being declared fit for duty,²¹¹ incomplete scripts were being sent to examiners and examiners were not receiving scripts until weeks after the examinations were taken.²¹² Bonuses of £100 for those markers who managed to get through their allocation of scripts²¹³ did little to placate them or the media.

ETS responded to the growing furore by setting up emergency marking centres and call centres but these failed to resolve the situation. Almost 200,000 pupils’ results were not available a month after the original deadline had passed and ETS informed schools that the remaining papers would be delivered in mid-August, right in the middle of the school holiday period.²¹⁴ In the end, the political ramifications of this disaster forced Ed Balls to act and on August 15th 2008, ETS had its contract terminated by the QCA.²¹⁵ To complete the humilia-

208 Ibid p.37

209 Ibid p.30

210 *Maddened markers complain they have been left in the dark*, TES, 2nd May 2008, see www.tes.co.uk/article.aspx?storycode=2615949

211 *Inaccurate examiners’ allowed to mark Sats*, TES, 23rd May 2008, see www.tes.co.uk/article.aspx?storycode=2625542

212 *Markers tick off new round of complaints*, TES, 30th May 2008, see www.tes.co.uk/article.aspx?storycode=2628647

213 *£100 bonuses fail to win over angry markers*, TES, 6th June 2008, see www.tes.co.uk/article.aspx?storycode=2631686

214 *Holidays on hold over Sats*, TES, 25th July 2008, see www.tes.co.uk/article.aspx?storycode=6000635

215 *Sats marking contract is scrapped*, BBC News, 15th August 2008, see news.bbc.co.uk/1/hi/education/7562835.stm

tion, EDEXCEL – the examination board that lost the marking contract to ETS in 2007 – were drafted in to provide additional support in remarking the SAT papers, such as the poor quality of the original marking.²¹⁶ Even so, reports were still rolling in as late as October that schools had not received their full complement of SAT results²¹⁷ and the news in March 2009 that up to half of all grades awarded for some papers were incorrect²¹⁸ dealt another heavy blow to the credibility of SATs.

Lord Sutherland’s inquiry into the marking saga, released on 16th December 2008, painted a damning picture of the QCA and ETS. The report noted an alarming number of significant failings, including:

- “[The procurement process] failed to identify relevant information regarding [ETS’] reputation and track record” (information that is openly available on the internet)
- “Areas of concern identified during procurement were not adequately addressed during delivery of the contract”
- “ETS’s project management was not fit-for-purpose”
- “QCA had project and risk management systems in place, but did not use these effectively”
- “The end-to-end [SAT] delivery system was insufficiently tested”
- “There were cumulative failures in different components and interfaces of the ETS delivery system [and the] QCA did not make an accurate assessment of the impact of these failures”
- “Few viable contingency options were built into the delivery system by ETS and QCA and those that were available were not put into action in a timely and appropriate way”
- “ETS did not invest in its relationship with schools and markers and its level of customer service was wholly unacceptable and lacked professionalism”

The inquiry prompted the suspension of Dr Ken Boston, Chief Executive of the QCA and the scrapping of KS3 SATS in the middle of a school year (see Chapter 5 for more details on KS3 assessment). In December 2008, EDEXCEL were awarded a one-year contract worth £25 million to mark the 2009 KS2 tests.²¹⁹ Since then Ed Balls, the QCA and EDEXCEL have all admitted it is not possible to guarantee that a similar fiasco would be avoided in 2009 or subsequent years because the tests have become unwieldy to the point of becoming almost unmanageable given the budgetary constraints and the supply of markers.²²⁰

Making progress towards replacing SATs?

The ETS fiasco and the subsequent abolition of national testing at KS3 part-way through the 2008/09 school year was accompanied by calls from organisations like the National Association of Head Teachers to scrap SATs at age 11 when KS2 is completed,²²¹ in addition to threatening to boycott SATs in 2010 with support from the NUT.²²² The Government was right to ignore these calls, as removing the accountability structure altogether would take us back to the dark days of the 1970s and 80s. It is already apparent that removing KS3 SATs has created something of a vacuum for teachers, with many schools feeling “that it was too late to turn their plans

²¹⁶ *Exam board to help sort out Sats*, BBC News, 27th August 2008, see news.bbc.co.uk/1/hi/education/7583882.stm

²¹⁷ *Still no sign of our Sats results*, TES, 3rd October 2008, see www.tes.co.uk/article.aspx?storycode=6003246

²¹⁸ *Up to half the grades on Sats papers were wrong says review*, The Guardian, 18th March 2009, see www.guardian.co.uk/education/2009/mar/18/sats-results-wrong

²¹⁹ *Award of contract for 2009 test operation services*, QCA Press Release, 31st December 2008, see www.qca.org.uk/qca_20841.aspx

²²⁰ *Examiners refuse to rule out SATs results delays*, The Independent, 31st December 2008, see www.independent.co.uk/news/education/education-news/examiners-refuse-to-rule-out-sats-results-delays-1218784.html

²²¹ *Now scrap Sats for 11-year-olds, Balls told as tests at 14 are axed*, The Guardian, 15th October 2008, see www.guardian.co.uk/education/2008/oct/15/sats-secondary-schools

²²² *Schools may try to boycott SATs*, BBC News, 26th March 2009, see news.bbc.co.uk/1/hi/education/7964005.stm

on their heads this year.”²²³ A more realistic danger is that the SATs fiasco of summer 2008 and the almost unanimous criticism of the distortion created by targets and league tables will panic the Government into implementing an alternative that would be even worse.

In 2006, as part of the Making Good Progress initiative discussed in the previous chapter,²²⁴ the Government launched a pilot of ‘single-level tests’. The idea is to allow teachers to enter pupils into a ‘pass or fail’ test for each National Curriculum level whenever they are ready to move up. So, for example, two 9-year-olds in the same class could be entered for different levels at the same time. Teachers can enter pupils for these tests twice a year and they can be taken repeatedly until the pupil passes. Once a pupil has achieved a level they can never return to a previous level (known as a ‘one-way ratchet’) regardless of their future performance.

The ‘Making Good Progress’ consultation only lasted for three months before closing in April 2007 but nonetheless elicited a number of highly critical responses on the plans for single-level tests.²²⁵ For example, just 42% of respondents agreed with the principle of entering pupils for a single-level test once they had progressed to the next National Curriculum level.²²⁶ Concerns included (but were not limited to):

- Single-level tests placing pressure on pupils throughout the Key Stage
- The lack of evidence that ‘fast-tracking’ a pupil through the tests resulted in sustained progress
- The lack of evidence that tests were any less burdensome than the current system
- Single-level tests undermining the professionalism and confidence in teacher’s own assessments
- Money being diverted from curriculum areas that were not tested in the single-level tests
- The creation of a ‘re-sit’ culture
- A negative impact on pupil self-esteem if high-achieving pupils pull further ahead
- The possibility that parental pressure on pupils and schools could increase (though this might be considered a positive outcome)

One particularly leading question on the consultation asked whether respondents agreed that single-level tests “could be a powerful driver for progression, raising expectations for all pupils, motivating them, bringing a sharp focus on ‘next steps’ and perhaps especially benefiting those who start the Key Stage with lower attainment than their peers, or are currently making too little progress”. In spite of the leading nature of the question, just 36% agreed.²²⁷

Unmoved by this negative feedback, Alan Johnson, then Secretary of State for Education and Skills, initiated the ‘Making Good Progress’ pilot in nearly 500 schools across England in June 2007.²²⁸ As we saw in the previous chapter, the tuition part of the pilot has been beset with problems. The same is true for the single-level tests. Even the NFER, who were commissioned to design the single-level tests, have had to admit as much. At an international conference on assessment held in September 2008, Chris Whetton, Director of Research in

223 Four out of five school ask to sit axed Sats, TES, 30th January 2009, see www.tes.co.uk/article.aspx?storycode=6007885

224 DfES, *Making Good Progress: How can we help every pupil to make good progress at school?*, DfES Publications, Nottingham 2006, p.12

225 *Making Good Progress consultation results*, DCSF website, see www.dcsf.gov.uk/consultations/index.cfm?action=conResults&consultationId=1449&external=no&menu=3

226 *Making Good Progress consultation results – Summary of responses*, DCSF website, Question 5.

227 *Making Good Progress consultation results – Summary of responses*, DCSF website, Question 6.

228 *Making Good Progress pilot*, see www.teachernet.gov.uk/teachingandlearning/schoolstandards/mgppilot/

Assessment and Measurement at the NfER, spelled out the reasons why single-level tests are in trouble:²²⁹

- Single-level tests will not provide diagnostic information for the pupil and teacher because they will only show what a pupil is able to do, not what a pupil is unable to do
- The DCSF's insistence that success at one level will stimulate progress toward the next level has no basis in educational research. In reality, achieving a level may demotivate pupils, given that the one-way ratchet ensures they can never drop a level once a single-level test has been passed
- Single-level tests will cover a much narrower range of the curriculum than SATs
- As these new tests would be shorter and more narrowly focussed, their statistical validity and reliability will be reduced, making them inappropriate as a measure of school accountability
- No procedures have yet been developed for establishing the reliability of these tests
- In order to fairly reflect a pupil's ability, teachers cannot make mistakes about when to enter pupils for the tests
- Teachers must be entirely consistent in their entry decisions for all pupils, which will be a difficult task given the number of different factors that can affect a pupil's performance in an examination setting
- The assumption that underpins the one-way ratchet in single-level tests is that children's learning is orderly and movement is always forward, neither of which are true, and these false assumptions could lead to numerous pupils being misclassified in their levels
- The same tests will be used at each level, regardless of how old the pupil is, because the nature of single-level tests means that a pupil is entered whenever they are 'ready'. However, designing question content and formats that treat pupils at all ages fairly is incredibly difficult, if not impossible. This becomes an even greater issue in mathematics, in which the syllabus is sequential - meaning that younger pupils will by definition not have covered the same content as older pupils.

Furthermore, with SATs in their current form, it is possible to gain any one of several different levels in one examination so there is no 'pass mark' in its strictest sense. With a single-level test, this is no longer the case; a specific pass mark must be set, above which a pupil is awarded the level and below which they 'fail'. It is reasonable to argue that because a pupil should only be entered for a test once they have mastered a particular level, the pass mark should be 90% or higher. Politically this is not tenable due to the detrimental impact it would have on pass rates. Nonetheless, the pass marks for each level will be eagerly monitored when they are released by the DCSF, even more so after the Government courted controversy in early 2008 by announcing a "technical change" to the marking system for single level tests that lowered the pass mark for the pilots.²³⁰

After the first trial of single-level tests in December 2007, the Government refused to release the results, citing problems with marking and level-setting that resulted in 'unexpected patterns' in pupil performance.²³¹ Initial results were

229 Chris Whetton, *The Big New Idea: Single Level Tests*, Paper presented at the 34th International Association for Educational Assessment Conference, 8 – 12 September 2008, Cambridge

230 *Pilot progress tests made easier*, BBC News, 15th February 2008, see news.bbc.co.uk/1/hi/education/7246871.stm

231 Chris Whetton, *The Big New Idea: Single Level Tests*, Paper presented at the 34th International Association for Educational Assessment Conference, 8 – 12 September 2008, Cambridge, p.6.

eventually released in December 2008²³² but provided little comfort for the Government. The single-level tests were given two outings, first in December 2007 and then in June 2008. In December 2007, the overall pass rate of the single-level tests was just 65% for pupils in Key Stage 2 and 19% at Key Stage 3, even though pupils were only supposed to be entered for the tests ‘when ready’. Entries for the June 2008 tests fell by 15% overall and by as much as 75% in some year groups, such was the impact on confidence of the December test results. The explanation for the appalling December results given in the pilot evaluation is that many pupils were entered for an ‘inappropriate’ test i.e. their performance in class (judged by their teachers) was lower than the level that they were entered for, which does not bode well for the accuracy of teacher assessment.

The detailed breakdown of the results reveals the true extent of the problems. As described in Chapter 1, each of the ten National Curriculum levels can be broken into three sub-sections: (a), (b) and (c). (a) represents the higher end of the level, (c) represents the lower end and (b) sits in the middle. It was noted above that many pupils (29%) were considered to have been entered for ‘inappropriate’ tests in December 2007. However, the definition of an ‘inappropriate’ test for a pupil was that they are working at (c) – the lower end of the level that they were tested at. On average, 27% of these lower-achieving pupils passed their respective single-level tests, but should 27% of pupils at the bottom end of the ability range for each level be able to pass these tests? Is this too high or too low? These questions are impossible to answer as the pass/fail boundary for each single-level test is entirely arbitrary, whereas the current SAT papers at least allow for the full range of achievement. Another complication is that teachers may enter pupils for supposedly ‘inappropriate’ tests on a regular basis “because the teacher expects them to progress to the appropriate level or sub-level by the time of the test [as] test entries precede actual tests by approximately six weeks.”²³³

Furthermore, the breakdown of results shows the just how inaccurate teachers can be in their assessment of their pupils. In December 2007, 34% of low achievers at Level 3 passed the Level 3 single-level test with 61% of pupils thought to be in the middle of Level 3 and 79% of those at the top of Level 3 achieving the same feat. For 39% of children judged to be ‘secure’ in the middle of Level 3 to fail the Level 3 test (which was aimed specifically at pupils of their ability) is worrying; for 21% of those judged to be at the top of Level 3 to fail the Level 3 test is even more concerning. At Levels 4 and 5 (late primary/early secondary), the pass rates for pupils continued to fall sharply to the point where in the Level 6 test the pass rate was only 32% for pupils judged to be at the top of Level 6, and was just 15% for pupils thought to be securely in the middle of Level 6 at the time of the test. Indeed, the scale of underperformance at Level 6 was staggering. The percentage of pupils judged to be comfortably working at Level 6 who passed the Level 6 test for mathematics was 9% and for reading was 3%.²³⁴ To translate, just 3% of pupils judged by their teachers to be working at Level 6 were able to

“After the first trial of single-level tests in December 2007, the Government refused to release the results, citing problems with marking and level-setting that resulted in ‘unexpected patterns’ in pupil performance”

232 PricewaterhouseCoopers LLP, *Evaluation of the Making Good Progress Pilot*, DCSF Publications, Nottingham 2008, p.57

233 Ibid p.58

234 Ibid p.67

demonstrate Level 6 reading skills in the single-level tests, meaning that either the tests were too difficult or the teacher judgements were hopelessly naive. Perhaps the single most ridiculous result was for the Level 5 reading test. The percentage of pupils thought to be in the middle of Level 5 who passed their Level 5 reading was 51% and the percentage of lower achievers at Level 5 passing their Level 5 reading was 39%. Neither of these results were particularly noteworthy until one considers that just 12% of pupils judged to be at the top of Level 5 passed the same test – 27% lower than the pupils who teachers believed to be less able than them.

In the second phase of the trial in June 2008, the KS2 pass rate rose to 88% from 65% in December 2007, but this was largely because children considered to be performing at the lower end of the level band did not take the test (the number of pupils entered for an ‘inappropriate’ test dropped from 12,000 to 4,200 pupils) and the pass mark was lowered. The pass/fail point was “moved from secure (i.e. pupils demonstrating performance in the *middle* or *top* of a level would pass the SLT) to threshold (i.e. pupils demonstrating performance *anywhere* within a level would pass the SLT)”.²³⁵ To make matters worse, some of those interviewed as part of the pilot were concerned about the appearance of identical questions on papers for different levels,²³⁶ raising further doubts about validity.

Although some dignity was salvaged in the KS2 results for June 2008, the same cannot be said for KS3. The appalling results for Levels 5 and 6 in December 2007 meant that: “...although KS3 pupils did sit [single level tests] in June 2008, the [National Assessment Agency] were unable to set a level for these pupils which meant that it was not possible to reach conclusions on pass rates for KS3.”²³⁷ In other words they could not find any way to make it work. One can only assume that the results for KS3 pupils (who would sit the Level 5 and 6 single-level tests) in June 2008 were just as disastrous as those in December 2007 and were not released to prevent embarrassment. Late in 2008, Ed Balls announced that single-level tests would not be used for KS3 students as a replacement for SATs. With weaker pupils having been withdrawn, pass marks being lowered and the test results for older pupils being scrapped, single-level tests have all the makings of a full-scale disaster if the Government decides to use them for KS2 pupils instead of SATs.

²³⁵ Ibid p.63

²³⁶ Ibid p.64

²³⁷ Ibid p.9

4

Primary recommendations

As we have seen over the past few chapters, the current Government's attempts to raise literacy and numeracy standards over the past twelve years in primary schools have largely failed. Given the high priority correctly attached to this issue when they took power and the billions of pounds spent to boost performance, this is quite extraordinary. The explanation for this lies in the way that resources, both financial and pedagogical, have been delivered. There is no question that primary schools struggled during the 80s and 90s to equip their students with basic skills, and the full extent of the problem was laid bare when the first rounds of national tests were taken. It is, therefore, understandable to a degree that the Government thought that the best approach was to standardise the offering across the country through National Strategies in literacy and numeracy.

Unfortunately, this approach has failed for two key reasons. First, it disengages schools. Even if the strategies are technically not statutory, most schools feel compelled to follow them because that is what local authority consultants tell them to do and to try something else represents a significant risk. If an entire system is set up to promote one methodology then to strike out on your own requires a headteacher of rare initiative and bravery. Combined with the Government's heavy-handed use of high-stakes tests, this has crippled innovation and put many talented professionals off teaching altogether. The second reason why this approach has failed is that the promotion of one national strategy crowds out alternative programmes that may work better. This slows down the process of innovation. While one school can quickly change the literacy programme it uses from analytic phonics to synthetic phonics, a national strategy is like an oil tanker, requiring a huge exertion of effort and time to turn round the collective bureaucratic mindset. Despite the clear success of synthetic phonics in the 'literacy wars', it took eight years for this to be acknowledged in the literacy strategy. Of course the personal investment of ministers and senior civil servants in the success of whichever model they have endorsed also works against rapid change.

In recent years, the Government have exacerbated the problem by endorsing intensive one-to-one tuition through the Making Good Progress pilot and their sponsorship of the 'Every Child' series of programmes. The schemes are hugely expensive, lack a solid evidence base and only help a minority of the children who are struggling with basic skills. To make matters worse, they sometimes contradict the content of the National Strategies and assume that there will be in perpetuity a consistent proportion of children unable to master literacy and numeracy in a normal classroom setting. We know from the success of other (frequently cheaper) programmes that this isn't true.

In this chapter, we make a series of recommendations which, in totality, would provide a much better balance between autonomy and guidance. We also recommend a series of measures that would help testing find an appropriate place in the education system, providing valuable information for teachers rather than a continuous headache. Finally we endorse, as many others have, the principle of national sampling as a way to provide clarity on measurements of standards over time.

Recommendations

1. Phase out the National Strategies

We would start by abolishing the Primary National Strategy. Since the inception of the Strategies, schools have been deluged by updates, new strands, new initiatives and in some cases entirely new (and occasionally contradictory) guidance from the Government on what should take place in the literacy and numeracy hours. Teachers in most primaries have to plan what each pupil must have achieved by the end of every week, every half-term and every term in order to keep pace with the Government's frameworks for the entire duration of primary school. The freedom of teachers and headteachers to arrange the curriculum and timetable in the most appropriate way for their pupils has been severely constrained. Moreover, the actual content of the strategies has

been questioned from the start. The 'searchlights' model of reading endorsed in the original literacy strategy has had to be scrapped, while the content of the numeracy strategy has been attacked by many academics and experts. Whatever the reason, they are no longer having any effect on performance. Indeed it is doubtful if they ever did. The initial upwards spike in KS2 results in the late 1990s happened before the strategies

were introduced and was probably due to increased familiarity with the tests and a lowering of test standards. All of this time and effort, a large proportion of which has therefore been wasted, has cost over £2 billion since 1997.²³⁸

The Primary National Strategy should be phased out over a few years to allow schools to put other arrangements in place. This would free up around £200 million a year, much of which is currently spent on local authority consultants (who may pressurise schools into using the Strategies), which could be used in primary schools instead. We don't believe, however, that it is sensible to leave schools to fend for themselves. This would risk a return to the patchy provision of the 80s and early 90s. The presence of testing in schools now mitigates against this to some extent, but we still believe that a framework of guidance and incentives would help schools choose suitable programmes for their students. Even so it would, crucially, be a choice available to every school.

2. Introduce a 'What Works Clearinghouse' maintained by a new Standards Agency (replacing OFQUAL) and incentivise schools to use programmes that work through funding

The first step in developing new guidance for primary schools is to establish a proper mechanism for collecting evidence about the performance of available interventions. As we have seen in the previous chapters, the Government fails to

“ We recommend a series of measures that would help testing find an appropriate place in the education system, providing valuable information for teachers rather than a continuous

²³⁸ Hansard, 14 Oct 2008, Column 1138W

properly use research evidence in policymaking. For example, the QCA states that upcoming changes to the primary school curriculum, being put forward by Sir Jim Rose, are supported by research. However, this research consists of “listening to and summarising the views of thousands of primary children and parents”, “seeking the views of thousands of practitioners”, visiting schools and attending seminars.²³⁹ This is a typical way of evaluating pilots but it fails to answer the key question: does the new curriculum actually work i.e. improve pupil’s performance? The Government’s support for the ‘Every Child’ interventions and the Making Good Progress tuition similarly lack a rigorous research base. The promotion of research evidence in the educational community is essential if best practice is to be identified, implemented and built on by curriculum experts. We recommend that the DCSF funds a research database similar to the ‘What Works Clearinghouse’ (WWC) supported by the American Government (it receives around \$4.5 million a year in funding from the Department for Education, equivalent to £3.1 million).²⁴⁰ We further recommend that this database is managed by a new and genuinely independent ‘Standards Agency’ that would replace OFQUAL.

Aside from monitoring and maintaining exam standards (including full transparency of pass marks and grade boundaries), one of the key roles of this new Standards Agency would be to commission research from academics and research institutions on the impact of various programmes on attainment. Commercial and charitable curriculum developers would apply to have their programmes tested and would be expected to pay a suitable proportion of the costs to avoid speculative applications. The Standards Agency would then monitor the research according to a specified set of research conditions. These could be based on those used by the WWC, which involves two main tests:²⁴¹

- **Randomisation:** two groups of participants (pupils) for the study must be created through an entirely random process. This is the most effective way to create two similar groups, meaning that any effect observed in the research (e.g. higher scores on a reading test) will be caused by the intervention programme that is being investigated. Although some minor variations are allowed, researchers must always demonstrate the two groups – one of which uses the new intervention programme and the other does not – are essentially identical.
- **Attrition:** this occurs when results are not available for every pupil who was present at the beginning of the study i.e. some of the pupils taking part have dropped out. This can be caused by a number of factors (e.g. families moving house, pupils refusing to take part at a later stage), but the WWC pays careful attention to the precise reasons given by researchers in order to judge whether the study has been compromised in any way.

Once a study has passed this screening process, the programme must demonstrate a positive effect on whatever aptitude – literacy, numeracy or otherwise – it is designed for. Consequently there are a number of reasons why a study would not be accepted by the WWC once this whole process is complete. For example, the ‘outcome measures’ (e.g. reading test, mathematics tests) may not be reliable, the two groups being tested might not have been similar enough or the attrition rate during the study may have been too high. By 2006, only three literacy programmes

239 *Thinking Primary*, QCA, see www.qca.org.uk/qca_15561.aspx

240 *Rigor and Relevance Redux – Director’s Biennial Report to Congress (2008)*, Institute of Education Sciences, see ies.ed.gov/director/pdf/20076004.pdf

241 *WWC Procedures and Standards Handbook – Version 2.0*, What Works Clearinghouse, see <http://ies.ed.gov/ncee/wwc/references/iddocviewer/doc.aspx?docid=19&tocid=1>

and one numeracy programme had passed every WWC test and shown a positive effect, although the US Department of Education has set themselves the ambitious target of expanding this to 20 and 18 approved programmes respectively by 2012.²⁴² Unlike the WWC, though, our new Standards Agency would also commission and (partially) fund research, meaning far fewer programmes would have their supporting evidence rejected on the basis of inadequate design.

Nevertheless, there are some features of the WWC that would need careful consideration before implementing such a model in the UK. At the moment, the WWC does not take into account the content of what is taught in each programme that it evaluates, nor does it consider the degree of teacher training or professional development demanded by each programme²⁴³ – all of which would provide a useful perspective when judging the relative merits of competing methodologies. The issue of ‘randomisation’ may prove contentious because many research studies prefer to use a ‘matched’ design whereby pupils are split between two groups on the basis of a single characteristic (e.g. gender) so that the characteristic balances in each group (e.g. each group has the same number of boys and girls). Although a ‘matched’ design is not technically randomised, it is still valid in terms of educational research yet the WWC is not always willing to accept it. We would also add one additional test – independence – as there has been some controversy in the US over the approval of a number of interventions on the basis of research conducted by individuals involved in the development or dissemination of that intervention. For example, Reading Recovery has been approved by the WWC in America but three of the four studies that passed all the criteria were conducted by former directors of the Reading Recovery Council of America.²⁴⁴ In addition, the limited scope of the WWC has meant that curriculum areas such as writing and older children’s reading have been largely ignored.

Within a few years of implementing a revised version of the WWC, there should be a range of successful programmes for schools to choose from (initially the approved list could be ‘pre-loaded’ with programmes that have a positive track record in the UK and/or the United States). It is important to emphasise that schools would not have to use a programme from this list for either literacy or numeracy. They would be free to buy-in alternative programmes or simply ignore the whole process and develop their own strategies. However, we recommend offering incentives to schools that pick a successfully-tested programme off the list. The money currently spent on the PNS, the Making Good Progress tuition and the ‘Every Child’ initiatives adds up to approximately £360 million a year. Assuming that £10 million of this would be needed to fund research through the Standards Agency, £350 million could be passed as an incentive to schools to use programmes proven to work. If every primary school participated this would translate to an extra £71.50 for every pupil in the country, or around £21,500 annually for a 300-pupil primary school.

Something similar already happens in America. ‘Title 1 funding’ (a separate pot of revenue from mainstream school funding) is available for States and local education agencies to use in schools if they select programmes that meet challenging academic standards in targeting the weakest pupils. Grants for ‘Title 1’ funding totalled \$13.9 billion (£9.6 billion) in 2008.²⁴⁵ One possible problem in introducing this to the UK would be confirming that schools are actually using

242 *Fiscal Year 2009 Performance Budget: Performance Plan (2008)*, U.S. Department of Education, see www.ed.gov/about/reports/annual/2009plan/fy09perfplan.pdf

243 *Foundations for Success: Report of the National Mathematics Advisory Panel*, U.S. Department of Education, see www.ed.gov/about/bdscomm/list/mathpanel/reports.html

244 See ies.ed.gov/ncee/wwc/reports/beginning_reading/reading_recovery/references.asp; Gay Su Pinnell was the Founder Director of the Reading Recovery Council of North America and R. M. Schwartz is a past President of the same organisation.

245 *Department of Education Budget Tables*, U.S. Department of Education, see www.ed.gov/about/overview/budget/tables.html?src=r

the programmes they claim to be using, but this could be resolved through matching records with programme providers and through OFSTED inspections. Since 2001, in response to the “weak, inconsistent or non-existent” evidence on the impact of Title 1 funding, the ‘No Child Left Behind’ Act mandated that rigorous evaluations take place to make sure that only scientifically proven programmes are funded.²⁴⁶ One additional advantage to offering incentive funding in this way is that it would stimulate the commercial market for literacy and numeracy programme development in England, as Title 1 funding has done in the United States, and would provide valuable research evidence for developers to use when constructing new models.

3. Scrap ‘single-level tests’ and look to regular adaptive online testing as a long-term alternative to Key Stage 2 tests

There is obviously a serious issue with Key Stage 2 testing. There is widespread discontent in schools and among assessment experts and few would deny that the ‘high stakes’ nature of SATs places a huge amount of pressure on pupils and teachers alike. In addition, SATs are distorting student experience. For example, non-SAT subjects are often dropped from the timetable in the final year of primary school and schools (and indeed the Government) tend to concentrate their resources on those just below the pass mark. At the same time, it is difficult to see how standards can be raised without some kind of assessment in primary schools or how parents can make informed decisions about schools without performance data.

The Government are currently developing ‘single-level tests’ as an alternative. These were, frankly, never going to work and the pilot has been a spectacular failure. The single-level tests, to be sat when a pupil is judged ‘ready’, led to such disastrous results in December 2007 that they could not even be released to the schools that piloted them for over a year. Pass rates went as low as 19% for tests that are only supposed to be sat once a pupil is ready to take them. Some of the data from the pilot studies in June 2008 was so appalling that the DCSF refused to release it altogether. Throughout the single-level test pilot, the expected problems with setting the arbitrary mark boundaries (which were inexplicably lowered during the pilot) and teachers’ judgements of when pupils are ready were all too evident. The Government should accept this particular alternative to SATs has not worked and scrap further pilots.

Nonetheless, there is undoubtedly a valid case to be made for combining formative assessment (which helps teachers understand how individual students are performing) and summative assessment (which gives a final result that can be used to make an overall judgement about a pupil and their school). Until this happens, KS2 tests will always seem irrelevant to classroom practice. Our recommendation is to move cautiously towards ‘adaptive testing’. This would take the form of a large database of multiple choice questions for literacy and numeracy that could be accessed online. These questions would be administered by teachers on a regular basis (perhaps as often as 6-8 times a year) throughout KS2. By using computer-based multiple choice tests, the software can provide accurate

“ The single-level tests, to be sat when a pupil is judged ‘ready’, led to such disastrous results in December 2007 that they could not even be released to the schools that piloted them for over a year ”

246 National Assessment of Title I: Interim Report to Congress, U.S. Department of Education, see <http://www.ed.gov/rschstat/eval/disadv/title1interimreport/index.html>

and immediate feedback on a pupil's strengths and weaknesses. This fits far better with the current Government's focus on 'Assessment for Learning' than single-level tests because adaptive testing would use feedback from tasks to inform pupils of their mistakes and help them to improve their overall performance. As the software could be designed to adapt to each individual student's performance (so, for example, if they answered a string of questions correctly subsequent questions would be harder), assessment would be genuinely 'personalised' for the first time.

An obvious concern of moving towards online testing is that the complexity of questions provided by paper tests would be lost to some extent. The state of technology already available in many parts of America suggests that this is not the case and the opposite may in fact be true. Adaptive testing is capable of testing complicated skills such as scientific enquiry, presenting information in dynamic and engaging ways (e.g. using animation), recording new types of data on pupil performance (e.g. the time taken on each section of the question) and incorporating extended questions, including essays.²⁴⁷ The capacity of schools to deliver adaptive testing remains key to its success and issues such as possible bias against pupils without internet access at home would need to be carefully examined. Nevertheless, we recommend adaptive testing as an effective, fair, efficient and personalised way of assessing the progress of primary school pupils – far more so than the current testing arrangements.

Regular delivery of smaller assessments would mean that pupils quickly become accustomed to adaptive testing. Furthermore, no single test would be 'high-stakes' because it would not represent a large proportion of a summative result. This would reduce the stress and anxiety associated with high-stakes testing, and teachers' workload will be considerably reduced (as would the cost of assessment) because the multiple-choice assessments provide fast and accurate feedback. Furthermore, information would be available for students every year, allowing a school to focus on all of their pupils rather than disproportionately on final year students as is presently the case. Data would be made available to parents throughout the year and annual average data for all pupils would be collated and used as one measure on the Government's new 'school report cards' so that prospective parents would have access to relevant information about the school. Crucially, data on progress could be used rather than just raw results, which would be far fairer to schools in more deprived areas and, because there would be so much data, would be far more accurate than the convoluted 'value-added' scores used for secondary schools. This regular collection of data would also be extremely useful to researchers monitoring the performance of new programmes as part of the new 'Standards Agency' commissioning process. Needless to say it would take time to develop a system like this, but our conversations with testing experts lead us to believe it is technically feasible.

It would not be necessary to use this kind of testing for younger children so for KS1 we support the Conservative Party's suggestion of a straightforward reading test, as reading is the key initial building block of education. As their Green Paper in 2007²⁴⁸ pointed out, the knock-on effect of not being able to read in the early years of secondary school can have a severe impact on future attainment in reading and subsequently in other areas of the curriculum. Their renewed focus

²⁴⁷ *Beyond the Bubble: Technology and the Future of Student Assessment*, Education Sector, see www.educationsector.org/usr_doc/Beyond_the_Bubble.pdf

²⁴⁸ *Raising the Bar, Closing the Gap*, The Conservative Party, see www.conservatives.com/~media/Files/Green%20Papers/Schools_Policy_Paper.ashx?dl=true

on reading, coupled with Ofsted paying more attention to the teaching of reading and new teachers being trained in how to deliver phonics more effectively, would be a welcome step in the right direction.

4. Introduce sampling as a new measure of national standards

The use of a national test at the end of primary school is not unusual in developed countries. One of the reasons that SATs have caused so much controversy in this country is the heavy-handed way they are used by the Government to make statements about national standards.²⁴⁹ Even the QCA admit that this is “stretching it too far.”²⁵⁰ This has meant that debate over standards at Key Stages 1, 2 and 3 (and GCSE/A-Level) have persisted for years. The manipulation of grade boundaries continues and the changing content of tests are just some of the factors undermining confidence in standards and raising serious doubts over the Government’s claims that literacy and numeracy are improving.

We recommend, as many others such as Cambridge Assessment²⁵¹ and the Children, Schools and Families Select Committee have done,²⁵² introducing national sampling of pupil performance, to be administered by the new Standards Agency, instead of using SAT data to judge overall national standards. Every year, a set number of randomly selected pupils would be asked to complete a test of their literacy and numeracy skills. A true picture of whether standards are rising or falling will be built up because a far wider range of questions can be asked, as children don’t all have to do the same test. This would be hugely valuable to literacy and numeracy programme developers as it would give us more information about exactly which parts of the curriculum children were finding hardest. Furthermore, the questions can remain almost identical over time so there can be no question of ‘dumbing down’ and the widely criticised practice of ‘teaching to the test’ would essentially be eliminated from a national perspective. Future government policy would be set according to the publicly available national sampling data, not on individual school or local authority performance.

249 House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.14

250 Ibid p.18

251 *Conference Papers*, Cambridge Assessment, see www.cambridge-assessment.org.uk/ca/collection1/digitalAssets/154945_Alternative_Approaches.pdf

252 House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.66

Secondary section

One result of the perceived yet ultimately illusory success of the primary literacy and numeracy strategies was the creation of the Key Stage 3 (KS3) Strategy in 2001, which extended the support offered to primary schools into the first three years of secondary education (ages 11-14). As with the PNS, the KS3 Strategy sought to raise standards across the curriculum. However, instead of concentrating solely on literacy and numeracy, the KS3 Strategy included strands for English, maths, science, foreign languages and design and technology. After the pilot of the KS3 Strategy involving 205 schools from 2000 to 2001 was completed, the strategies for English and maths were rolled out across the UK in 2001 with science and other subjects following later.

The KS3 Strategy has suffered from exactly the same flaws as the primary version. It is seen as an unnecessary and burdensome intrusion by teachers who feel they have to comply because of pressure from local authority 'advisors'. As with the primary strategies, the impact on achievement has been negligible. KS3 results improved dramatically before the strategies were introduced but have stalled subsequently. Millions of pounds have been wasted on contracts with providers and advisors that could have gone to schools instead. The failure of the secondary strategy simply reinforces the message: centralised prescription does not work.

At the Key Stage 4 (14-16) level, a different set of problems have emerged regarding the quality and quantity of qualifications offered. Questions about the standard of GCSE papers have been asked since their introduction, as grades increase year-on-year, and have only intensified in the past few years as first science and now maths papers have been overhauled. A more recent development, though, is the appearance of the new 'Diploma' as an alternative 'applied' qualification that tries to straddle the gap between academic and vocational learning. The Diplomas have already run into all sorts of problems, described in detail in Chapter 7. For anyone who has followed their troubled history, this will come as no surprise. Initially the result of a classic fudge, they are mindboggling complex and hopelessly unfocused.

Meanwhile one of this Government's genuine successes – Young Apprenticeships – that offers a work-based alternative to 14-year-olds uninterested in the traditional academic route has been more or less ignored, despite extravagant praise from Ofsted. We see this small programme as the kernel of a genuine vocational route for 14-16 year olds that could link in to the post-16 apprenticeship programme. In Chapter 9 we offer a series of recommendations explaining how this route could sit alongside an 'applied' route in the form of a radically simplified version of the Diploma programme as well as GCSES providing an academic option. Offering a clear choice of these three options to 14-year-olds would require simplifying the existing proliferation of

qualifications, many of which try to occupy the same 'applied' route as the Diplomas. It would also mean replacing the already defunct KS3 SATs with a new 'pupil profile' that would help children and their parents make the decision about which route was best for them.

5

Key Stage 3 – The Secondary National Strategy and assessment

The frameworks that accompany each subject area in the KS3 Strategy are similar in structure and content to those produced for the NLS and NNS several years earlier. As the KS3 Strategy was intended to follow on directly from primary school lessons, even the core areas of teaching (for example, word level, sentence level and text level strands for teaching English) were identical. Likewise, the frameworks contained an equally daunting list of objectives for Years 7, 8 and 9 pupils as well as explaining the assessment arrangements that teachers should abide by. Although the minute-by-minute breakdown of the literacy and numeracy hours in primary schools was not included, the Government did provide the structure of ‘typical lessons’ in each framework that split class time into three or four distinct sections, each with their own headings and time allocations.²⁵³

The apparent rapid improvement seen in literacy and numeracy performance at the end of primary school appeared to be replicated in the pilot of the KS3 Strategy. The evaluation of the pilot by the University of Bath and the Institute of Education from 2001 to 2002, involving discussions with policymakers, local authority staff, teachers and pupils, found that the new strategy was “raising the profile of KS3 in schools and LEAs, focusing on teaching and learning [and] raising expectations, especially for lower attaining pupils.”²⁵⁴ The pilot also noted a “willingness to respond rapidly to feedback from schools” in addition to “indications of positive reactions from pupils.”²⁵⁵ 79% of the teachers in the pilot and 92% of the ‘strategy managers’ within the schools agreed that the pilot had benefited their teaching.²⁵⁶

Even at this stage, though, concerns were raised about the scale of what schools were being asked to deliver. For example, 69% of the strategy managers were worried about “the pressure of the timetable for implementing each strand [and] that rushed timing might affect ultimate success and sustainability”²⁵⁷ while “even the most enthusiastic pilot schools were concerned about the sheer workload involved in the Pilot.”²⁵⁸ Nonetheless, the Government continued the roll-out of the KS3 Strategy and in the autumn of 2002 the KS3 Strategy was launched nationwide.

In ‘Key Stage 3 Strategy: Myths and Legends’,²⁵⁹ published as the strategy came into force in 2002, the Government was keen to point out that the frameworks are non-statutory, that they were designed so as not to stifle creativity and that “the Strategy is not run by politicians”. Even so, just a few paragraphs later the document stated that “the government and LEAs have committed almost £500 million to the

²⁵³ DfES, *Framework for Teaching English: Years 7, 8, 9*, DfES, London 2001, p.17, p. 28.

²⁵⁴ DfES, *Preparing for Change: Evaluation of the Implementation of the Key Stage 3 Strategy Pilot*, DfES Publications, Nottingham 2003, p.5

²⁵⁵ Ibid p.5

²⁵⁶ Ibid p.32

²⁵⁷ Ibid p.30

²⁵⁸ Ibid p.31

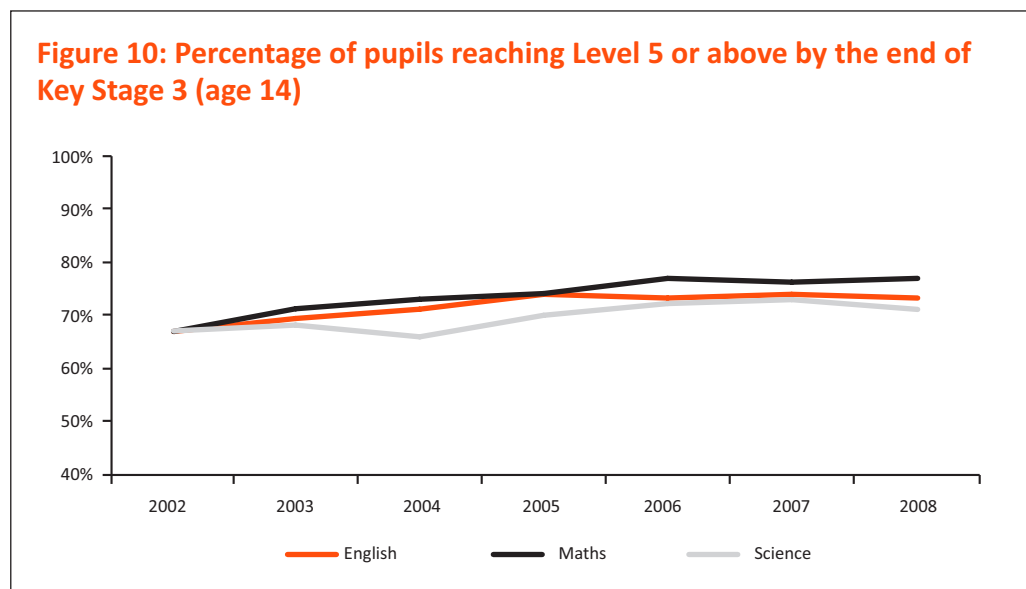
²⁵⁹ DfES, *Key Stage 3 National Strategy Myths and legends*, HMSO, London 2002

Key Stage 3 Strategy [over] the three years [and] every school with Key Stage 3 pupils receives part of this but each year some schools get extra funding to help them put their action points into practice.”²⁶⁰

Local authorities are responsible for the National Strategies at secondary as well as primary school, so the local authorities employ ‘consultants’ at considerable expense who advise schools on how to deliver the Strategies as well as running ‘school improvement teams’ and ‘challenging’ schools whenever they deem it necessary. Instead of the local authorities employing literacy and numeracy consultants in the same way as they do for primary schools, the KS3 strategy requires to them offer ‘subject consultancies’ in English, maths, science, ICT and foundation subjects (Art, Design & Technology, Geography, History, languages, Music, P.E. and Religious Education).²⁶¹ As with primary schools, Capita provide training and support materials as well as liaising with the local authorities. The cost of delivering the National Strategies at secondary level is £109 million for the academic year 2008/2009, although investment in the KS3 Strategy has varied over time e.g. in 2005, £86 million was allocated versus £220 million in 2003 when the Strategy was in its early stages.²⁶² The total cost will be approaching £1 billion by 2010.

Before and after the KS3 Strategy

The success of the KS3 Strategy is measured by the Government as the percentage of pupils reaching Level 5 or 6 at age 14 in English, maths and science. The reason that this target straddles two levels is that each ‘level’ was designed to correspond with two years of schooling and KS3 finishes three years after the end of primary school when Level 4 is the expectation for all pupils.



260 DfES, *Key Stage 3 National Strategy Myths and legends*, HMSO, London 2002, p.3

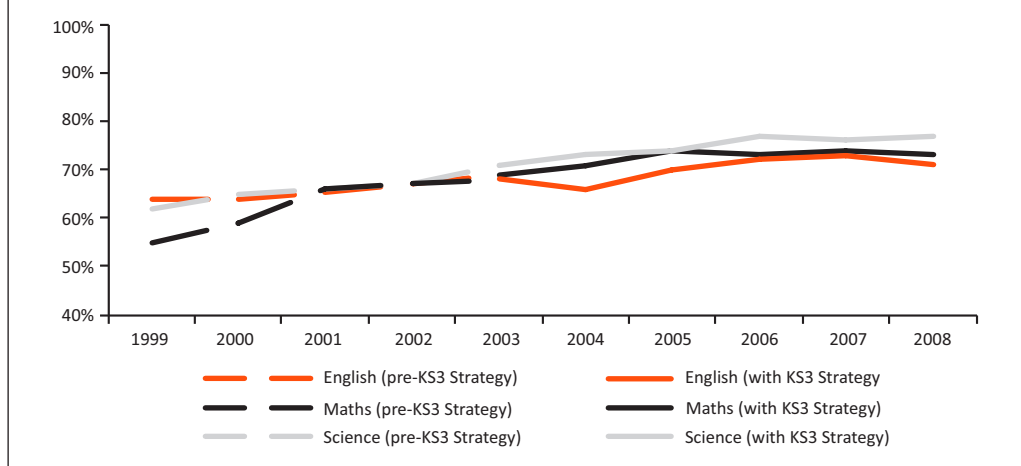
261 *Key Stage 3 National Strategy*, DSCF, see www.dcsf.gov.uk/standardsfund/5FCircular2003-2004.htm

262 *The School Funding pages*, Teachernet, see www.teachernet.gov.uk/management/school-funding/

In contrast to the early performance gains made after the introduction of the National Strategies in primary schools, a cursory glance at the percentage of students reaching Level 5 – the lower end of expected achievement at age 14 –

indicates that the KS3 Strategy has had a far more modest impact (Figure 10).²⁶³ Purely by coincidence, the percentage of pupils reaching Level 5 was 67% in all three core subjects when the KS3 Strategy was rolled out nationwide in 2002. The KS3 Strategy initially appeared to bring about a steady but small improvement in performance. In its first four years, the percentage of students reaching Level 5 rose by 6% in English, 10% in maths and 5% in science. As with the National Strategies in primary school, though, over the last couple of years, the early increases have ground to a halt. In 2008, the percentage of students reaching Level 5 in English and maths is exactly the same as it was two years ago while performance in science has fallen by 1%.

Figure 11: Percentage of pupils reaching at least Level 5 by the end of Key Stage 3 (age 14) before and after the introduction of the KS3 Strategy



Furthermore, as with the PNS, results were already improving before the strategy was introduced (Figure 11),²⁶⁴ raising serious questions about whether it had any impact at all. In fact, the percentage of students reaching Level 5 in science fell dramatically when the KS3 Strategy was first introduced and even now remains a mere 4% higher than it was in 2002. English and maths both followed the same (if not marginally worse) trajectory as their pre-strategy performance levels, indicating a poor return on the substantial investment in the Strategy.

Trends in the number of children achieving Level 6 are similarly disappointing. Figure 12 demonstrates that the first four years of the KS3 Strategy (2002-2006) saw increases in the percentage of students reaching Level 6 in English (+2%), maths (+12%) and science (+8%).²⁶⁵ Unfortunately, there has been no further progress in the last two years. Neither maths nor science has recorded any improvement since 2006 whereas the percentage reaching Level 6 in English has dropped 2% over the same period.

Figure 13²⁶⁶ provides an even more damning critique of the Strategy. As we have seen at Level 5, the rollout of the KS3 Strategy in 2002 had a minimal impact as test scores continued on the same trajectory that they were already on. At Level 6 the KS3 Strategy seems to have caused a drop in literacy performance. From 1999 to 2003, the percentage of pupils reaching Level 6 rose by 11% in maths, 16% in

²⁶³ *National Curriculum Assessments at Key Stage 3 in England, 2008 (Provisional)*, DCSF, see www.dcsf.gov.uk/rsgateway/DB/SFR/s000805/index.shtml

²⁶⁴ Ibid

²⁶⁵ Ibid

²⁶⁶ Ibid

science and 7% in English, but from 2003 (when the KS3 Strategy was first examined) to 2008 these increases have been reduced to an 8% rise in maths, a 1% rise in science and a 2% fall in English. As with the higher achievers in primary school, the National Strategies appear unable to cope with the need to differentiate and ‘stretch’ the brighter pupils in a predominantly whole-class setting.

Figure 12: Percentage of pupils reaching Level 6 or above by the end of Key Stage 3 (age 14)

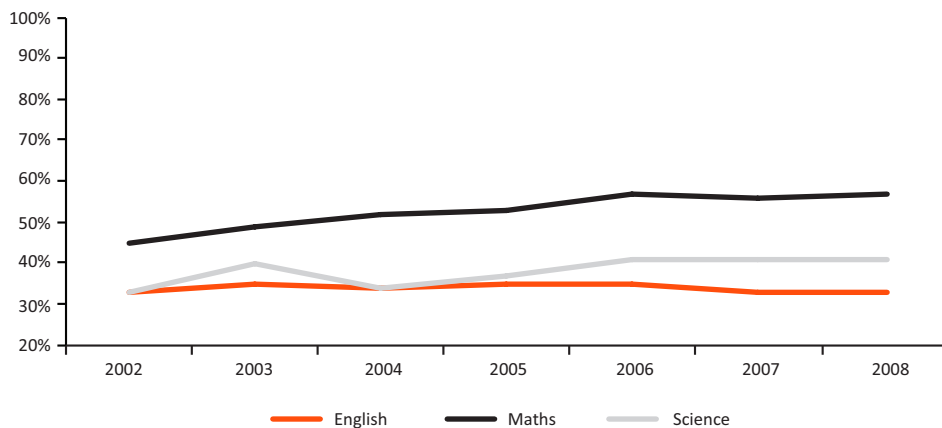
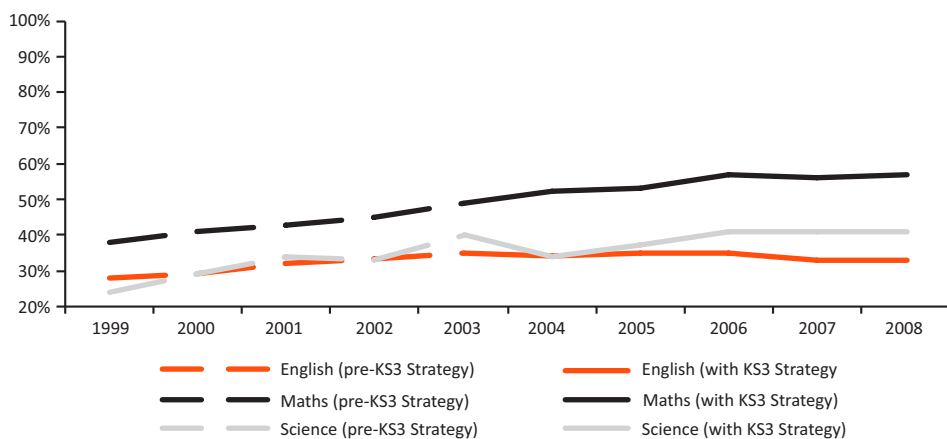


Figure 13: Percentage of pupils reaching at least Level 6 by the end of Key Stage 3 (age 14) before and after the introduction of the KS3 Strategy



The national target set by the Government for Key Stage 3 was for “85% of 14 year olds to achieve at least Level 5 in English [and] mathematics [by 2007]...with 80% achieving Level 5 in science, with this level of performance sustained to 2008.”²⁶⁷ These targets were missed by some distance – our pupils are 12% behind in English, 8% behind in maths and 9% behind in science relative to the Government’s aspirations.

267 Target Setting: National Targets, DCSF, see www.standards.dfes.gov.uk/ts/informationcentre/nattar/

Furthermore, the small increase in test scores that has been recorded at KS3 does not necessarily indicate better literacy, numeracy or scientific understanding among 14-year-olds. Although there have been no studies of KS3 like the independent test comparison by Tymms and others for KS2, there are still plenty of reasons for scepticism. The issue of 'teaching to the test' and teaching resources being targeted at those working just below the required level are just as relevant here as they are at the end of primary school.

Key Stage 3 statistics

- The early improvements seen after the creation of the KS3 Strategy have stalled and test scores in English and science are now falling
- The KS3 Strategy lost the momentum of test score increases observed in the years prior to its introduction in 2002
- In 2008, 34,000 pupils completed Key Stage 3 without reaching the minimum standard for primary-school leavers in maths. The equivalent figures for science and English were 28,000 and 15,000 respectively.²⁶⁸
- 46% of the boys and 34% of the girls who started their GCSEs in 2008 cannot read, write and count to the minimum standard²⁶⁹
- Since the KS3 Strategy began in 2002, around 1 million children have started their GCSEs without achieving the minimum literacy standards, over 900,000 started without achieving the minimum numeracy standards and almost 1.1 million have started without acquiring the necessary scientific knowledge

Assessment at Key Stage 3

Optional tests in English and maths are available in Years 7 and 8 but until last year most attention was directed at the assessments completed after Year 9 (age 14). Since KS3 tests began in 1993, pupils have sat tests in English, maths and science that had a similar structure to those set at KS2. In a panicked acknowledgement that it would be impossible to resource both KS2 and KS3 compulsory tests in 2009 in the aftermath of the ETS fiasco, Ed Balls announced in October 2008 that the national tests at KS3 would be abolished.²⁷⁰ For this announcement to be made well after the new academic year had started gives some indication of the degree of desperation felt by the Government and the degree to which this was a political rather than an educational decision. That said, the move was broadly welcomed by opposition parties and teacher unions as an overdue acknowledgement that the current testing regime is not working.²⁷¹ The abrupt demise of the Key Stage 3 tests must also be held against the incredibly low standards that were expected of 14-year-olds. In 2007, Level 5 (the minimum expectation at age 14) could be achieved by scoring 33% in science, 30% in English and 22% in maths.²⁷²

Nevertheless, removing the tests so suddenly has left a gaping hole at the end of KS3. Teachers have been left floundering as their classes were designed around the tests, while parents and pupils have been left confused that up to three years of schooling has been directed at non-existent tests. Despite years of complaints from teachers, over 3,000 schools have signed up to take KS3 tests voluntarily in 2009 because the "[school] management are terrified they're not going to have data on pupils and believe parents want to see the results."²⁷³

²⁶⁸ *National Curriculum Assessments at Key Stage 3 in England, 2008 (Provisional)*, DCSF, see www.dcsf.gov.uk/rsgateway/DB/SFR/s000805/index.shtml

²⁶⁹ Measured by the number of pupils failing to achieve Level 5 in reading, writing and mathematics

²⁷⁰ *Tests scrapped for 14-year-olds*, BBC News, 14th October 2008, see news.bbc.co.uk/1/hi/education/7669254.stm

²⁷¹ *Unions welcome end of secondary Sats*, The Guardian, 14th October 2008, see www.guardian.co.uk/education/2008/oct/14/sats-scrapped-reaction

²⁷² *National Assessment Agency Archives – Level threshold tables*, NAA, see www.naa.org.uk/naa_18985.aspx

²⁷³ *Schools keep testing 14-year-olds*, BBC News, 9th April 2009, see news.bbc.co.uk/1/hi/education/7991073.stm

A working party of headteachers and educational professionals will be advising the Government on the new assessment arrangements for Key Stage 3, which will most likely involve classroom tests leading to teacher assessment, more frequent reporting across Years 7, 8 and 9 and national sampling of Year 9 pupils to measure standards.²⁷⁴ Internal teacher assessments in English, maths, science and foreign languages still remain statutory, as does awarding a National Curriculum level for every subject,²⁷⁵ but this may change once the new arrangements are announced. Nevertheless, the vacuum created by the ending of compulsory testing at 14 has revealed that, even if existing ‘high stakes’ tests are distorting the education system, getting rid of external standardised assessment simply because there was not enough time to plan a suitable alternative has caused more problems than it has solved.

274 Major reforms to school accountability including an end to compulsory national tests for fourteen year olds, DCSF press release, 14th October 2008, see www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2008_0229

275 Key Stage 3 TARA, NAA, see www.naa.org.uk/naa_21417.aspx

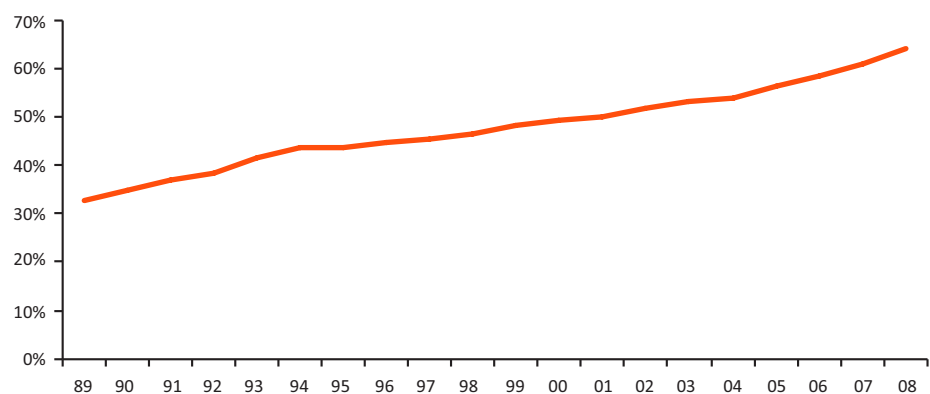
6

GCSEs

Ever since the GCE Ordinary level – the ‘O’ Level – was introduced in 1951,²⁷⁶ it has been the primary academic route for 14 to 16-year-olds in one form or another. As O-Levels were taken mainly at grammar and independent schools, it was still the case as late as the 1960s that most children left school with no qualifications. The introduction of the Certificate of Secondary Education (CSE) in the mid-1960s alongside O-Levels soon became seen as a second-class qualification in the eyes of admissions tutors and employers. Following years of debate and discussion on this issue in the 1970s and 80s, it was finally decided that a single set of qualifications should be created by merging O-Levels and CSE to form a new General Certificate of Secondary Education (GCSE), with the first GCSE examinations sat in 1988.

It did not take long for problems with the new GCSEs to arise. In response to the increasing number of ‘A’ grades being awarded, the new A* grade was introduced in 1994²⁷⁷ – just six years after GCSEs began. Grades kept on rising regardless. The rise in the percentage of students achieving at least 5 GCSEs at grade C or above (the standard government measure of national and local performance since 1988, shown in Figure 14) has been nothing short of remarkable.²⁷⁸

Figure 14: Percentage of pupils achieving at least 5 A*-C grades in their GCSE examinations

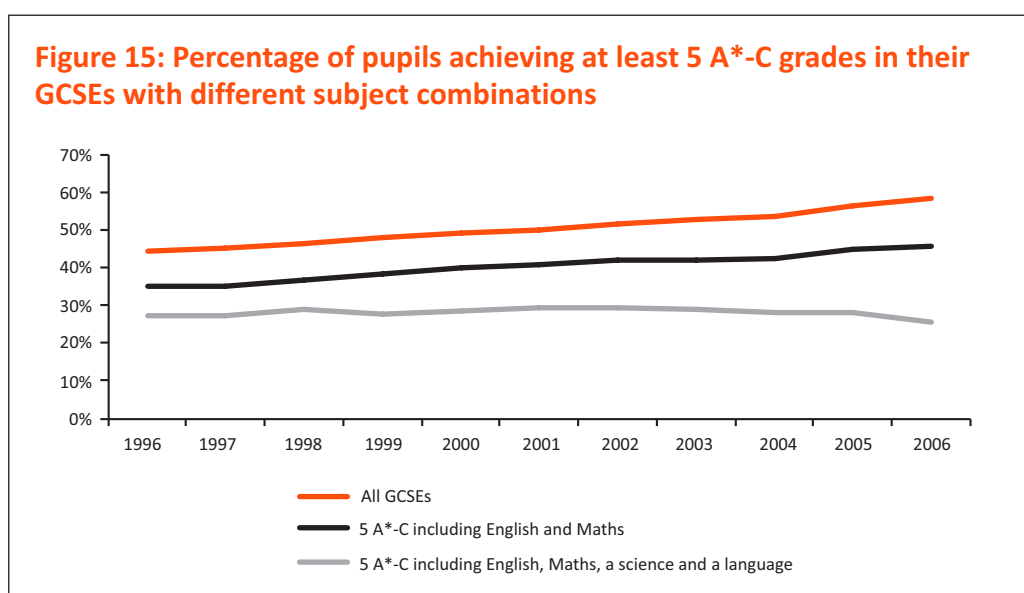


²⁷⁶ *The story of the General Certificate of Secondary Education (GCSE)*, QCA, see www.qca.org.uk/qca_6210.aspx

²⁷⁷ Ibid

²⁷⁸ *Percentage of pupils aged 15 achieving 5 or more GCSEs or equivalent at grades A* to C, England, 1994/95 to 2007/08*, DCSF, see www.dcsf.gov.uk/trends/index.cfm?fuseaction=home.showChart&cid=5&iid=32&chid=137

That said, when looking at GCSE performance it is important to remember that GCSE 'equivalents' are included in these figures. Between 1997 and 2007 when they were phased out, attainment in vocational GNVQs has been included in the national performance data for GCSEs. This has allowed schools eager to push more pupils over the 5 A*-C boundary line to very effectively 'play the system' by introducing the IT GNVQ which has been worth the equivalent of 4 GCSE passes at A*-C, despite taking the same amount of time to teach as one academic GCSE.²⁷⁹ To illustrate the point, in 2008 there were 69,200 pupils entered for a GCSE in IT versus 46,900 for the GNVQ worth 4 GCSEs. The Government have, to their credit, now acknowledged this trick and are using a new measure of 5 A*-C grades including GCSE English and GCSE Mathematics to judge schools. This new measure, though, still incentivises schools to allow or even encourage pupils to take easier, less academic GCSEs. A closer look at how pupils are performing in more academic GCSEs reveals a disturbing picture, as demonstrated by Figure 15:²⁸⁰



If GCSE passes from pupils who did not achieve at least grade C in both English and maths are excluded, the national pass rate was 10% lower in 1997. In response to a parliamentary question in 2006,²⁸¹ it was revealed that this gap had grown to almost 13%, indicating that basic skills are improving at a slower rate than other GCSEs and over 50% of pupils (350,000 in 2006) are finishing compulsory education at age 16 without achieving the minimum standard in English and maths, despite billions of pounds in investment. If we focus on pupils achieving 5 A*-C grades including English, maths, a science and at least one foreign language, the picture is even worse. In 2008, only 22.7% of pupils in maintained schools across the country achieved this reasonably modest standard and the percentage is still falling.²⁸²

In addition to concerns over the kind of GCSEs being taken, analysis carried out by Durham University indicates that there has been direct inflation in scores. Their research on GCSEs looked at the relationship between pupil performance on the

²⁷⁹ ICT switch gives leg up the league tables, TES, 18th May 2007, see www.tes.co.uk/article.aspx?storycode=2386472

²⁸⁰ Harris M, *Education Briefing Book*, Institute of Directors, London 2008, p.47

²⁸¹ Hansard, 8th November 2006, Column 1742W

²⁸² Hansard, 5th March 2009, Column 1829W

‘Yellis’ test (an independent test of student ability) and their GCSE results. This allowed researchers to investigate whether pupils now achieve the same grades as pupils of the same ability did in previous years. Their analysis has shown that from 1996 to 2007, the average score achieved by candidates of the same ability rose by almost two-thirds of a GCSE grade²⁸³ and “it is clear that the likely outcomes for students of the same ability are better now than in past years and that if a particular grade is taken to indicate a particular level of ability, its value has declined.”²⁸⁴

The inflation of scores can also be partly attributed to the practice of ‘borderlining’ – described by the Education and Skills Select Committee on testing and assessment as “an inappropriate proportion of resources diverted to pupils on the borderline of achieving the target standard, to the detriment of both higher achievers and of those with little or no hope of reaching the target, even with assistance.”²⁸⁵ The obvious danger of ‘borderlining’ is that, as pointed out by the Association of Colleges, “whilst a pupil may have the necessary grades to progress to the next level, if that learning is shallow, focussed only on passing the test, they

may not have a full grasp of the necessary concepts or sufficient intellectual rigour to deal with the demands of the next level ...[leading to] false expectations resulting in a sense of inadequacy [which] may well account for the high dropout rate at 17”.²⁸⁶

This practice has been historically driven by league tables, which reward schools for getting more pupils to achieve 5 A*-C grades at GCSE and has recently been exacerbated by

the ‘National Challenge’²⁸⁷ that threatens schools with closure unless 30% of their pupils achieve 5 A*-C grades. Thus pupils on the borderline of the C/D grade boundary will receive a disproportionate amount of attention, leaving many pupils (both more able and less able) without the support they need to improve their grades. In giving evidence to the Select Committee, the Association of Teachers and Lecturers (ATL) cited a study which found that “a focus on the achievement of a particular level, together with booster classes, may have the effect of assisting pupils to achieve a Level 4 in mathematics, for example, but that this level is not sustained over a period of six months to a year.”²⁸⁸ The decision by schools to attach extra significance to pupils on the C/D borderline is understandable, given the pressure placed on them by school league tables and the possible threat of closure, but that does not make it any less problematic from an educational perspective.

The shift in core subject content

The tremendous importance to schools of the 5 A*-C target means there is a real incentive for teachers to ‘play the system’ by focusing on less academic subjects and targeting resources at pupils on the C/D borderline. Perhaps more worryingly, because the trend of schools trying to artificially inflate pupil performance is hard to reverse, the content of the core academic subjects is being eroded as a result. The recent changes to the science curriculum provide the best example of this.

“ The tremendous importance to schools of the 5 A*-C target means there is a real incentive for teachers to ‘play the system’ by focusing on less academic subjects and targeting resources at pupils on the C/D borderline ”

²⁸³ Coe, R & Tymms, P, “Summary of research on changes in educational standards in the UK”, in Harris M (ed), *Education Briefing Book*, Institute of Directors, London 2008, p.97

²⁸⁴ Ibid p.106

²⁸⁵ House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.30

²⁸⁶ Ibid p.31

²⁸⁷ *About the National Challenge*, DCSF, see www.dcsf.gov.uk/nationalchallenge/

²⁸⁸ House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.31

The days when most children studied Biology, Chemistry and Physics separately are long gone. In the early 1990s, ‘Double Award’ (worth two GCSEs instead of three) was created as an alternative to studying three separate sciences.²⁸⁹ In September 2006, the situation changed again with the introduction of the ‘21st Century Science’ curriculum that focuses on scientific literacy (e.g. global warming and mobile phone technology) rather than the underlying grammar of the subject. Most students now take a single ‘GCSE Science’ course plus either GCSE Additional Science or GCSE Additional Applied Science, which has a more practical focus and is designed for those intending to take a vocational scientific course rather than A-levels.²⁹⁰ It remains possible to take three separate science subjects, though fewer than 8.5% still take this route.²⁹¹

The academic rigour of these new science qualifications was immediately called into question. For a start, the GCSE Science examination only contains multiple-choice questions. To compound this, one version of GCSE Science requires pupils to take six multiple-choice tests over two years, each lasting 20 minutes, but then gives pupils the opportunity to re-sit each of these tests up to six times – with only the best score on any of the re-sits counting towards the final grade. The 45-minute written test set that also forms part of the assessment can be retaken up to 12 times.²⁹² In addition, the introduction of the GCSE Science route has resulted in scores improving dramatically across the board, with 66% of students achieving a C or above on the AQA’s ‘Additional Science’ exam that can be taken after GCSE Science compared to 55% in the equivalent ‘Double Award’ GCSE the previous year.²⁹³ This was compounded by the revelation that the AQA exam board was forced, under protest, to lower their pass mark for a grade C in the new GCSE Science papers by OFQUAL, the Government’s new examination watchdog²⁹⁴ – a particularly ironic incident, given that OFQUAL was supposedly set up to ensure “standards are maintained.”²⁹⁵ Perhaps this should not come as a surprise, seeing as OFQUAL’s chair Kathleen Tattersall admitted in February 2009 (several months after OFQUAL was set up) that it was not clear what was meant by “maintaining standards”.²⁹⁶ Further alarm over the intended role of OFQUAL was created when Kathleen Tattersall stated in March 2009 that “Ofqual has been set up to regulate the system, to get better public accountability for the system, to ensure that there is a better public understanding of the issues and to assure public confidence”,²⁹⁷ making no mention of ensuring that standards remain constant. Similarly, Ed Balls has refused, even when asked directly, to explain what he means by “maintaining standards”.²⁹⁸ Even a simple answer such as ‘standards will be kept constant over time’ has not been forthcoming. Suspicions over low standards in science examinations were substantiated yet again when students who sat a Chemistry paper from the OCR examination board in 2008 achieved a grade C by scoring as little as 18% because examiners “were reportedly forced to lower the pass mark because many 16-year-olds found the examination too difficult.”²⁹⁹

Despite the apparent confusion regarding their purpose, OFQUAL’s recent investigation of GCSE standards managed to elicit a number of uncomfortable truths for the Government. They concluded that “the results of our monitoring of the new GCSE science specifications in 2007 and 2008 and the review of standards in GCSE physics in 2007 raised significant causes for concern”,³⁰⁰ adding

289 *Critics attack new Science GCSE*, BBC News, 11th October 2006, see news.bbc.co.uk/1/hi/education/6038638.stm

290 *GCSE Applied Science (B) specification*, AQA, see www.aqa.org.uk/qual/newgcse/science/new/scienceb_overview.php?id=03&prev=03

291 *Brown sets target for science*, BBC News, 27th February 2009, see news.bbc.co.uk/1/hi/education/7915233.stm

292 *New GCSEs offer pupils 48 chances to sit tests*, The Daily Telegraph, 14th March 2009, see www.telegraph.co.uk/education/educationnews/4990440/New-GCSEs-offer-pupils-48-chances-to-sit-tests.html

293 *Exam board changes science GCSE pass mark*, The Guardian, 24th October 2008, see www.guardian.co.uk/education/2008/oct/24/science-grades-changed

294 *Exam board changes science GCSE pass mark*, The Guardian, 24th October 2008, see www.guardian.co.uk/education/2008/oct/24/science-grades-changed

295 *OFQUAL website*, see www.ofqual.gov.uk/

296 *New fears over dumbing down of key exams*, The Observer, 15th February 2009, see www.guardian.co.uk/education/2009/feb/15/dumbing-down-exams-school

297 Hansard, 24th March 2009, Column 558

298 Hansard, 23rd February 2009, Column 27

299 *School children pass GCSE for knowing fewer than a fifth of the answers*, The Daily Telegraph, 6th February 2009, see www.telegraph.co.uk/education/educationnews/4537407/School-children-pass-GCSE-for-knowing-fewer-than-a-fifth-of-the-answers.html

300 *Standards review and qualification monitoring*, OFQUAL press release, 27th March 2009, see www.ofqual.gov.uk/2219.aspx

that “our monitoring shows that the revisions to the GCSE science criteria in 2005 have led to a fall in the quality of science assessments” – a feeling that is echoed by many others. The shift towards ‘literacy’ and ‘relevance’ has seriously undermined the value of these new science qualifications. Sir Richard Sykes, former rector of Imperial College London, has labelled the new GCSEs as “sound bite science” based on a “dumbed down syllabus”.³⁰¹ He has also questioned whether these examinations would prepare students for higher education. Against this backdrop, Ed Balls’s claim that “there has been no dumbing down of our science qualifications”³⁰² looks extremely vulnerable.

The issue here is not the inclusion of issues such as the environment and healthy eating in science lessons which, of course, could potentially engage more young people in the subject. The problem is that the new science curriculum seems to have introduced more relevant content at the expense of rigour, instead of in addition to. This problem is evident even in the separate Biology, Chemistry and Physics examination papers – supposedly designed for more able pupils. A good example can be found in the January 2008 Chemistry paper (Higher Tier) from the AQA examination board, which presented pupils with a nutrition label from a pack of smoked salmon along with a question (Figure 16).³⁰³

Figure 16: Excerpt from the January 2008 Chemistry paper from the AQA examination board

- (b) The amount of salt in this smoked salmon may be considered unhealthy.
Explain why it is advisable to consume only one portion of the smoked salmon per day.
-
.....
.....
.....
- (2 marks)

Not only is the difficulty and academic credibility of the question highly debatable, the marking guidance given to examiners on what constitutes an acceptable answer for this question is even more disheartening. The RDA for salt is 6g (as stated on the question paper) and the label used in the question showed that this packet of smoked salmon contained 1.6g (almost exactly 25% of the RDA) yet the guidance to examiners told them to award two marks if a pupil wrote that the salmon has either 20% or 33% of the RDA, even though this is patently the wrong answer. The candidate would even have received one out of two marks for writing that ‘the salmon has a lot of salt’.

Finding further examples of the low standards in science examinations is all too easy. The ‘21st Century Science’ papers for Biology, Chemistry and Physics offered by OCR are all multiple choice, even for their ‘Higher Tier’ examinations. EDEXCEL fare little better, as evidenced by this question from their 2006 GCSE Science paper:³⁰⁴

301 *Critics attack new Science GCSE*, BBC News, 11th October 2006, see news.bbc.co.uk/1/hi/education/6038638.stm

302 Hansard, 23rd February 2009, Column 25

303 *Chemistry C1 - Higher Tier (Question 3)*, AQA, January 2008, see www.aqa.org.uk/qual/newgc-ses/science/new/chem_materials.php?id=03&prev=03

304 *GCSE science concerns explained*, BBC News, 27th March 2009, see news.bbc.co.uk/1/hi/education/7967600.stm

“Our moon seems to disappear during an eclipse. Some people say this is because an old lady covers the moon with her cloak. She does this so that thieves cannot steal the shiny coins on the surface. Which of these would help scientists to prove or disprove this idea?

- A) Collect evidence from people who believe the lady sees the thieves
- B) Shout to the lady that the thieves are coming
- C) Send a probe to the moon to search for coins
- D) Look for fingerprints”

More recently, the report from the Chief Examiner at EDEXCEL into their 2008 GCSE Science papers remarked that “Candidates seemed secure on some aspects of the solar system and space but over 20% of candidates thought the Sun orbited the Earth” while “only 58% realised that solar cells receive their energy from light energy.”³⁰⁵

Concern over the direction of science education has grown to such a level that seven of the most important scientific institutions, including the Royal Society and the Institute of Physics, came together in 2007 to set up SCORE (Science Community Representing Education) to work against these trends.³⁰⁶ Some institutions have been more outspoken than others, but the e-petition on the Number 10 Downing Street website, submitted by the Royal Society for Chemistry, expresses a view supported by many:³⁰⁷

“Science examination standards at UK schools have eroded so severely that the testing of problem-solving, critical thinking and the application of mathematics has almost disappeared. Even bright students with enthusiastic teachers are being compelled to “learn to the test”, answering undemanding questions to satisfy the needs of league tables and national targets. The RSC has powerful evidence of the decline in standards, adding to the revelation that students are able to receive a “good pass” with a mark of 20%. This system is failing an entire generation which will be unequipped to address key issues facing society, whether as specialist scientists or members of a wider scientific community. The record-breaking results in school examination passes are illusory, with these deficiencies having to be remedied at enormous expense by universities and employers. This is compounded by key sections of the education community being in denial. Unless addressed, we will see a continuing decline in our international competitiveness, reduced prosperity for ourselves, and limited career prospects for our children. Urgent action is required before it is too late.”

This petition was backed up by a study showing that 2000 students sitting a composite science exam made up of questions from five decades of O-Level/GCSE questions found more recent questions much easier than older ones (the paper was designed so that the topics were still covered in the GCSE Chemistry curriculum in some form or another). The average mark for questions from the 1960s was 15% compared to 35% for questions from the current decade.³⁰⁸

GCSE Mathematics is now at risk of falling into the same trap. Standards have already deteriorated dramatically over the past twenty to thirty years. A recent analysis showed that over time, the content covered in GCSE Mathematics has narrowed, the questions have become easier and the standards required to pass the examination have fallen dramatically (in between 1990 and 2006, the pass mark for grade C fell from just over 50% to about 20%).³⁰⁹ Then, in December

305 GCSE science concerns explained, BBC News, 27th March 2009, see news.bbc.co.uk/1/hi/education/7967600.stm

306 Science Community Representing Education, SCORE, see www.score-education.org/index.htm

307 Royal Society of Chemistry e-petition, 10 Downing Street website, see petitions.number10.gov.uk/examstandards/

308 Past science papers stump pupils, BBC News, 9th July 2008, see news.bbc.co.uk/1/hi/education/7497486.stm

309 Kounine L et al, *The value of mathematics*, Reform, London 2008

2008, it was announced that secondary schools are to pilot a ‘twinned’ Mathematics course that would be worth two GCSEs. As with the new structure of the science GCSEs, the signs are that a ‘Double Maths’ GCSE has been designed to encourage more students to take the subject by focusing on mathematical literacy rather than deeper understanding. The new mathematics course will examine “mathematics in everyday contexts including financial applications” and “problem solving within mathematics”, with Schools Minister Sarah McCarthy-Fry arguing that this new option “will be accessible to students who have a good grasp of the basics and want to learn more.”³¹⁰ After what happened with the new science curriculum, in which the core paper was diluted down to a massively simplified multiple-choice exercise with an additional examination available for those who wish to go further, there is a serious risk that maths may suffer the same fate. The DCSF press release announcing the new twinned mathematics GCSE specifically stated that examination boards will be asked to develop a syllabus that “should help students develop confidence in maths”³¹¹ rather than challenge and stretch the pupils in order to understand their true ability.

The upheaval of GCSEs is set to continue. By 2010, a huge raft of changes will be unleashed on the GCSE years, including scrapping coursework in every GCSE subject and replacing it with controlled assessments, the QCA setting new assessment criteria along with introducing new styles of questions, introducing a new syllabus in virtually every GCSE subject, the release of a new ‘GCSE English’ course that will contain far less literature as it now needs to measure ‘functional’ skills and moving towards a modular structure (which is already predicted to lead to higher grades because it will allow pupils to re-sit individual course ‘units’ in every subject³¹²). On the basis of a major skills pledge made in 2005 by then Secretary of State for Education Ruth Kelly, the Government had also intended to make every pupil take ‘functional skills’ tests for literacy and numeracy (originally designed for the new ‘Diplomas’) in addition to their GCSEs. These tests had to be passed before a pupil could be awarded a grade C or higher in GCSE English or maths to ensure that every pupil had achieved basic literacy and numeracy by age 16. These tests were never likely to be onerous, yet the requirement to sit them has now been dropped in the name of “fairness” and schools will simply ‘encourage’ pupils to take these additional tests instead.³¹³ This degree of endless tinkering results not only in the loss of valuable time for teachers and schools but also the steady degradation of a valued set of qualifications. The evidence is clear enough: standards at GCSE level have dropped, pupils are being held back by inappropriate content, confusion and duplication are rife and learning continues to be distorted by the perverse incentives of league tables and government targets.

310 *Maths piloted as ‘twinned’ GCSEs*, BBC News, 12th December 2008, see news.bbc.co.uk/1/hi/education/7779503.stm

311 *New ‘twinned’ maths GCSE to be piloted*, NCETM website, 15th December 2008, see www.ncetm.org.uk/files/344717/DCSF+press+release+151208.doc

312 *GCSE grades to ‘rise with change’*, BBC News, 20th March 2009, see news.bbc.co.uk/1/hi/education/7954936.stm

313 *GCSE basic skills pledge scrapped*, BBC News, 2nd April 2009, see news.bbc.co.uk/1/hi/education/7979267.stm

7

Diplomas

The origins of the new Diplomas can be traced back to the A-level scandal of 2002, in which schools alleged that results were artificially lowered to prevent too great a leap in results following the introduction of the Curriculum 2000 reforms two years earlier. This led to resignations at the QCA and, eventually, in Government when Estelle Morris resigned as Secretary of State for Education in October 2002.³¹⁴ The immediate trigger was the publication in September 2002 of Sir Mike Tomlinson's (former Chief Inspector of Schools at OFSTED) investigation into the A-Level grade scandal, which described the marking procedure as "an accident waiting to happen." After Morris's resignation, Tomlinson was asked to chair a new working group on reforming qualifications covering the 14-19 age range.

On its conclusion in October 2004, the final report of the working group on 14-19 reform³¹⁵ – known as the Tomlinson Review – proposed a radical shift in both what was taught and the way in which it was delivered. The key recommendation of the Review was that all courses at Key Stage 4 and 5 should comprise two components for every pupil: 'core learning' (functional mathematics, functional literacy and communication, functional ICT, completing an extended project and acquiring a number of other skills and attributes as part of the course programmes) and 'main learning' (focusing on a chosen area or subject). The entire system of qualifications for 14-19 year olds was to be replaced by a system of diplomas, available at four levels – entry, foundation, intermediate and advanced levels – through which these two components would be delivered (Figure 17).

Figure 17: The new diploma framework proposed by the Tomlinson Review compared to the qualifications in place in 2004 (graphic taken from the Tomlinson Review)

Diplomas			Current Qualifications
Advanced	Core	Main learning	Level 3
Intermediate	Core	Main learning	Level 2
Foundation	Core	Main learning	Level 1
Entry	Core	Main learning	Entry
			Advanced Extension Award; GCE and VCE AS and A level; level 3 NVQ; equivalent qualifications
			GCSE grades at A*-C; intermediate GNVQ; level 2 NVQ; equivalent qualifications
			GCSE grades D-G; foundation GNVQ; level 1 NVQ; equivalent qualifications
			Entry level certificates and other work below level 1

314 Timeline: Estelle Morris, BBC News, 23rd October 2002, see news.bbc.co.uk/1/hi/uk_politics/2354993.stm

315 Tomlinson M, *14-19 Curriculum and Qualifications Reform: Final Report of the Working Group on 14-19 Reform*, DfES Publications, Nottingham 2004

It was decided that each pupil should enter the ‘diploma framework’ at age 14 at the appropriate level and progress through the diploma levels over time through completing their core and main learning components. This would have meant that existing qualifications such as GCSEs and A-Levels would cease to exist in their own right and would be incorporated into the main framework over time. Within the four levels there would be up to 20 Diploma ‘lines’ i.e. broad subject categories such as Social Sciences, each of which offered a range of academic and vocational courses designed by providers, Higher Education institutions, Sector Skills Councils and employers.

The simpler framework offered by these diplomas was warmly received by the teaching unions and Charles Clarke, then Secretary of State for education, who described the Diploma as a “cogently argued, challenging and compelling vision of the future”.³¹⁶ The vision, though, was immediately killed by the Prime Minister Tony Blair who announced on the day the review was released that A-Levels and GCSEs were here to stay. Two months later, a cabinet reshuffle saw Charles Clarke replaced as Secretary of State for Education by Ruth Kelly and the Schools Minister David Miliband moved from his post.³¹⁷ Any indication that these academic qualifications would be scrapped was considered highly toxic politically as the General Election was just months away.

Instead the Government decided on a classic fudge. The diploma would be introduced alongside existing qualifications, thus nullifying the one obvious benefit of the Tomlinson proposals: simplicity. In 2005 they published a White Paper on reforming the 14–19 curriculum³¹⁸ that half-heartedly described a new three-level ‘Diploma’, which sought to combine academic and vocational learning in work-related areas such as media and engineering, thereby leaving GCSE, A-Levels and existing vocational courses unaffected. Those who had supported the Tomlinson proposals were not fooled. The Association of Colleges chief executive John Brennan described the White Paper as “a wasted opportunity” and general secretary of the NUT Steve Sinnott believed that “this re-branding does not disguise the fact that the academic/vocational divide has been widened rather than narrowed.”³¹⁹ Mike Tomlinson expressed his concern that the White Paper “may only emphasise the difference between the vocational and the academic rather than bringing them together”, and he added that “my greatest fear is that vocational will continue to be seen as second best and available and taken by those who ‘can’t do anything better’.”³²⁰

Consequently, the Government’s version of the Diplomas began life unloved by anyone. Tomlinson’s supporters saw them as a watered down cop-out, while those who had always seen Tomlinson’s report as an attack on academic qualifications still considered the new Diplomas a threat. For most experts, the Diploma programme launched in September 2008 represents the worst of both worlds, doing nothing to simplify the system for young people and offering neither quality vocational education nor a convincing academic route.

Mixed messages from the very beginning

From the very start, the Diplomas have had all the hallmarks of a confused fudge, designed to appease a sector angry that the Tomlinson proposals had been rejected rather than because there was demand among students or schools for the

³¹⁶ *Tomlinson Report*, ePolitix, 17th October 2004, see www.epolitix.com/briefings/article-detail/newsarticle/tomlinson-report/

³¹⁷ *Why Tomlinson was turned down*, BBC News, 26th February 2005, see news.bbc.co.uk/1/hi/education/4299151.stm

³¹⁸ *DfES, 14–19 Education and Skills*, HMSO, Norwich 2005

³¹⁹ *Mixed response to exam proposals*, BBC News, 23rd February 2005, see news.bbc.co.uk/1/hi/education/4291459.stm

³²⁰ *Diplomas represents ‘missed chance’*, BBC News, 23rd February 2005, see news.bbc.co.uk/1/hi/education/4290831.stm

new qualification. The Government has identified a number of aims for the Diplomas but rather than being clear, unambiguous and achievable, they come across as hopelessly overambitious and contradictory. According to the Education and Skills Select Committee report on Diplomas in 2007,³²¹ the aims of the Diploma are:

- Increasing participation levels at post-16, from a current rate of 76% of young people. In March 2007, the Government published the Green Paper ‘Raising Expectations’ which contained the proposal to raise the leaving age for education or training to 18 by 2015, identifying Diplomas as a key means of meeting the additional demand for learning.
- Providing a sound basis for progression to higher education, including developing the attributes that universities frequently say students lack – such as the skills of independent inquiry.
- Being a qualification which “genuinely meets the needs of employers”
- Providing more stretch and challenge “in a way that the current curriculum does not consistently achieve”

The first objective highlights Diplomas as a key method in meeting the additional demand for courses once the school leaving age is increased. Given that almost all young people capable of taking A-levels already do so, this aim suggests that post-16 Diplomas are targeted at school leavers who would not be able to manage A-levels. This seems to directly contradict the second aim. The belief that a single qualification could encourage progression onto higher education, meet employer needs and stretch pupils from across the ability range whilst also supporting young people who cannot manage A-levels is patently unrealistic. For all their problems, academic qualifications such as GCSEs and vocational qualifications such as BTECs benefit from having a relatively clear purpose.

As we will see in this chapter, the Diplomas are designed in such a way that they are unlikely to prepare students for either higher education or employment, and the response from employers and universities confirms these fears. The confusion over what the Government are trying to achieve was summed up by Alan Johnson, then Secretary of State for Education, telling the Select Committee that “the whole point of these Diplomas is that they are vocational education. They do not lead to a vocational qualification.”³²² In their report, the Committee noted the “failure [of the Government] to appreciate the sheer scale and complexity of the challenge in hand”³²³ from the very outset.

“ The belief that a single qualification could encourage progression onto higher education, meet employer needs and stretch pupils from across the ability range whilst also supporting young people who cannot manage A-levels is patently unrealistic ”

321 House of Commons Education and Skills Committee, *14-19 Diplomas*, TSO, London 2007, p.9

322 Ibid p.15

323 Ibid p.32

324 *What Is A Diploma?*, Direct-Gov / The Diploma website, see yp.direct.gov.uk/Diplomas/what_is_a_Diploma/when_do_they_start/

How the Diplomas work

Diploma courses began for the first time in September 2008. 17 subjects will be available by the time the Diploma programme is fully operational, but the individual subject lines will be introduced in ‘waves’ over four years (Table 4).³²⁴

Table 4: the original timetable for introducing the Diploma subject lines

September 2008	September 2009	September 2010	September 2011
Construction and the Built Environment	Environmental and Land-based Studies	Travel and Tourism	Humanities
Creative and Media	Business, Administration and Finance	Public Services	Languages
Engineering	Manufacturing and Product Design	Sport and Active Leisure	Science*
Information Technology	Hospitality	Retail Business	
Society, Health and Development	Hair and Beauty Studies		

* Science Diploma at Advanced level delayed until September 2012

To help clarify the new Diploma programme in terms of structure and content, the QCA produced a document entitled ‘The Diploma – An Overview of the Qualification’³²⁵ (which had already reached its third version by March 2008). Every Diploma is broken into components known as ‘Principal Learning’, ‘Generic Learning’ and ‘Additional and Specialist Learning’:

Principal learning

This component contains subject-related learning focused on applying knowledge and skills relevant to a particular industry sector through tasks, problems and situations. It comprises of units of assessment that represent a given number of ‘Guided Learning Hours’ (GLH), which can be either teacher-led work, directed study time, learning in the workplace, tasks set in workshops and school-related activities.

Generic learning

This component is broken into:

- ‘Functional skills’ (students must reach Level 1 in English, Mathematics and ICT to complete the Foundation Diploma and reach Level 2 for the Higher and Advanced Diploma)
- ‘Personal, learning and thinking skills’ (independent enquiry, creative thinking, reflective learning, teamwork, self-management, effective participation), all of which are expected to be shown throughout the Principal Learning units, work experience and the project
- A minimum of 10 days of work experience or part-time work for older learners
- A project, which has a common structure across all three levels and operates as a stand-alone qualification that receives its own grade

³²⁵ QCA, *The Diploma: An Overview of the Qualification*, QCA, London 2008

Additional and specialist learning

As with the Principal Learning, this enables pupils to specialise, which involves taking additional qualifications and complementary courses – usually though not necessarily in subjects related to the Principal Learning.

As illustrated in Table 5, each Diploma subject is available at four different ‘levels’. As one progresses through the Diploma levels, the quantity and complexity of Principal Learning and Additional/Specialist Learning increases and the project becomes more demanding. Conversely, the emphasis on generic learning, especially functional skills, diminishes as a pupil moves to the next level of Diploma. No ages are attached to any of the Diplomas, theoretically allowing pupils to begin their chosen level whenever they are deemed ready. The Foundation Diploma is effectively aimed at those pupils who are working at a level between Key Stage 3 and 4 (Level 1), the Higher Diploma is designed for pupils at GCSE level (Level 2) and the Advanced Diploma is aimed at pupils studying at A-Level standard (Level 3). The Progression Diploma is exactly the same as the Advanced Diploma apart from the exclusion of two components, suggesting that it is intended to act as a ‘fall-back’ option for those who fail to complete the Advanced Diploma.

Table 5: Summary of the structure for each of the Diploma levels in every subject line

	Foundation (Level 1)	Higher (Level 2)	Progression	Advanced (Level 3)
Principal learning	240 GLH	420 GLH	540 GLH	540 GLH
GENERIC LEARNING				
Functional skills	120 GLH	80 GLH		
Project	60 GLH	60 GLH	120 GLH (extended)	120 GLH (extended)
Personal, learning and thinking skills	60 GLH	60 GLH	60 GLH	
Work experience	Minimum of 10 days	Minimum of 10 days	Minimum of 10 days	
Additional/specialist learning	120 GLH	180 GLH	360 GLH	
Equivalent to	5 GCSEs at grades D-G	7 GCSEs at grades A*-C	2.5 A-Levels	3.5 A-Levels
Intended length	1 year	1 to 2 years	(not specified)	2 years

GLH = guided learning hours (either teacher-led work or directed study time)

Duplication, duplication, duplication

Even from this simplified description, it is plainly apparent that these new Diplomas are not easy to understand. The original Tomlinson Review aimed to “make the system more transparent and easier to understand by rationalising 14-19 curriculum and qualifications within a Diploma framework, where progression

routes and the value of qualifications are clear”,³²⁶ whereas the Government’s Diplomas have achieved the opposite. By 2011, assuming there are no further interventions by politicians, there will be 17 subjects available as a Diploma, each of which will have four levels at which the Diploma can be studied – giving a total of 68 separate Diplomas. In addition, at each of the four levels within each of the 17 subjects, the Principal Learning and Additional/Specialist Learning components have their own syllabus. For example, the ‘Creative and Media’ Diploma includes elements of around 20 employment fields including fashion and footwear design, advertising, drama, film, TV, radio, computer games, creative writing, woodwork, metalwork and ceramics. In just one Diploma subject, ‘Creative and Media’ students are faced with choosing from a total of 49 specialist options for the Advanced Diploma, 83 for the Higher and 80 at Foundation level.³²⁷ In giving evidence to the Children, Schools and Families Select Committee on testing and assessment in 2008, Greg Watson from OCR described the

“There is an obvious danger that in trying to cover everything, the Diplomas end up covering too little in sufficient depth to successfully prepare students in their chosen field”

Diplomas as “the most complicated qualification that I have ever seen”³²⁸ and it could get worse still. In 2011, an ‘Extended’ Diploma will be made available, containing extra English and maths plus extra Additional and Specialist learning. This Diploma will be offered at Foundation, Higher and Advanced levels in all 17 subjects and will be worth a greater number of equivalent GCSE and A-Level grades than the ‘standard’ Diploma – bringing the total number of Diplomas to 119.

There is an obvious danger that in trying to cover everything, the Diplomas end up covering too little in sufficient depth to successfully prepare students in their chosen field. There was already a wide range of work-related qualifications to choose from before the Diploma programme was introduced.

At GCSE standard (Level 2 on the National Qualifications Framework), GNVQs were available between 1997 and 2007. These have now been withdrawn in favour of ‘Vocational GCSEs’, which were first examined in 2004. The popularity of these qualifications has increased a little over the past few years but they are still sparsely used by schools. Health and Social Care – the most popular Vocational GCSE – only has 27,800 pupils taking it each year, which is 5,000 fewer than GCSE Home Economics and almost 15,000 fewer than GCSE Textiles Technology. Moreover, GCSE Health and Social Care appears surplus to requirements as this subject is also available as an NVQ in Health and Social Care, a BTEC First Diploma in Health and Social Care, a BTEC First Certificate in Health and Social Care, a BTEC Technical Certificate in Health and Social Care, a BTEC Introductory Certificate in Health and Social Care, a BTEC Introductory Diploma in Health and Social Care and an OCR National in Health and Social Care. These courses have now been joined by the Diploma in Society, Health and Development. This is by no means the only example of a Diploma directly overlapping with established qualifications in the academic and vocational routes. That said, the proliferation of courses for the 14-16 age group started well before the introduction of Diplomas. At GCSE level, there are already 2,915 courses on offer to students.³²⁹

326 Tomlinson M, *14-19 Curriculum and Qualifications Reform: Final Report of the Working Group on 14-19 Reform*, DfES Publications, Nottingham 2004, p.4

327 Smithers A & Robinson P, *The Diploma: A disaster waiting to happen?*, Centre for Education and Employment Research, University of Buckingham 2008, p.12-13

328 House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.78

329 Search carried out on the National Database of Accredited Qualifications website, see www.accreditedqualifications.org.uk/AdvancedQualification-Search.aspx

From the descriptions of Vocational GCSEs and Diplomas it is hard to tell what the difference is supposed to be:

Vocational GCSEs: “You will find out more about your chosen vocational area, including different types of jobs. You will gain practical skills and knowledge that will be useful to you in a job or further training. For example, if you choose GCSE health and social care, you will learn about the effects of diet and lifestyle, and how to produce an individual health plan. You will probably visit workplaces and meet a range of people who work in that field. Many students like these subjects because they are able to take responsibility for what they do. You will also learn some general skills such as communication, research and learning to work as part of a team, which will be valuable whatever you choose to do in the future. If you’re looking for a course that is practical, relevant and relates to the real world, then a GCSE in a vocational subject may be right for you.”³³⁰

Diplomas: “A Diploma is different to what you’re used to. You get more choice about what you learn and you can keep your options open for the future by exploring subject areas without committing to a career in them. It’s usually a 2 year course, whatever level you study at. You’ll learn in the classroom and you might also spend time at another school or college in your area. You’ll do practical stuff like projects and work experience and learn life skills that are important for work, study and the future. You can use what you learn to tackle real life situations like you’d find at work, study or in research.”³³¹

The list of Diploma courses includes ‘Engineering’, ‘Information Technology’, ‘Construction and the Built Environment’, ‘Travel and Tourism’ and ‘Business, Administration and Finance’ – all of which bear a striking similarity to the names of existing Vocational GCSEs. GCSE Media Studies, although not technically a Vocational GCSE, will also be similar in content to parts of the ‘Creative and Media’ Diploma. At A-Level standard (Level 3 on the National Qualifications Framework) there is similar duplication between BTECs, Applied A-levels and ‘Advanced’ Diplomas.

Apart from the unnecessary confusion and bureaucracy engendered by these qualifications, a further question arises: if Diplomas are meant to be a combination of academic and vocational routes, why do they share such a significant overlap with existing vocational qualifications? There is a strong argument for a set of qualifications that focus specifically on subjects that combine a mixture of academic study and vocational training, such as Engineering. However, for more vocational subjects like Construction and the Built Environment why develop a qualification that requires spending a huge amount of time in a classroom rather than in the workplace (in contrast with the NVQ of the same name that has a much stronger vocational element)? In fact, the minimum of ten days work experience required to pass the Diploma course does not even have to be related to the subject being studied, meaning that a student could pass a Diploma in Construction and the Built Environment without ever having set foot on a building site. There may also be a problem of the Diplomas overlapping with existing academic qualifications such as A-Levels. In a recent attack on the proposal to introduce Diplomas in academic disciplines, Professor Adrian Smith, one of the most senior education civil servants, described the new science diploma as a “slightly schizophrenic” concept that tries to challenge A-levels while offering work-based learning.³³²

330 *Choosing a GCSE in a Vocational subject*, QCA, see www.qca.org.uk/14-19/6th-form-schools/68_1120.htm

331 *What is a Diploma?*, Direct-Gov / The Diploma website, see yp.direct.gov.uk/Diplomas/what_is_a_Diploma/

332 *Top civil servant tears into key school policies*, TES, 13th February 2009, see www.tes.co.uk/article.aspx?storycode=6008666

Classrooms cannot substitute for the workplace

The confusion in the objectives of Diplomas is born out even more vividly by the Diploma in 'Hair and Beauty Studies' (beginning in September 2009). In the same way that Construction appears unsuited to a classroom, the purpose behind a Diploma that teaches students about hair and beauty in a school instead of a salon is equally hard to fathom. Not only do existing BTEC and NVQ courses cover almost every aspect of workplace training in this field, the specifications for Hair and Beauty studies make for extraordinary reading. As part of the Foundation Diploma,³³³ pupils will be asked in the classroom to learn about:

- "The skills necessary to create an initial and ongoing positive impression. For example, washing hands"
- "The different types of hair and their characteristics. For example: wavy, straight and curly"
- "The eras and events in history which have influenced modern hair styles ...e.g. Egyptian, Grecian, Roman"
- "How to communicate with clients to find out their requirements. For example: ask questions"
- "Safe working practices for carrying out nail services and why they are important. For example: ...follow manufacturers' instructions"
- "How to perform effectively and keep looking and feeling good throughout the working day. For example: ...a good diet"

Although this knowledge may be important, it could be acquired in a matter of hours in a hairdressing salon instead of labouring the point in classroom. In fairness, the specifications recommend that pupils practise skin, nail and hand care treatments on models, friends or even on themselves but the question remains as to how effectively this course would prepare them for a career. There is surely no need for an academic classroom-based qualification to cover these areas at age 14.

Grading and marking the Diplomas

Alongside confusion over the purpose of the Diplomas, there are also numerous technical problems that threaten to undermine the qualification over the coming years. According to the QCA, a combination of internal and external assessment will be used and the student's overall progress will be recorded on a 'transcript'. To achieve a Diploma, a student must complete every component: Principal Learning, Functional Skills, Personal, Learning and Thinking Skills, Additional / Specialist Learning and the project as well as completing their ten days of work experience. The Principal Learning units and the project will constitute the internal assessment portion of the Diploma. This will place more responsibility for judging student progress in the hands of professionals. Given what we know about teacher's ability to make accurate judgements about the literacy and numeracy of 8-year-olds, asking them to assess the quality of work produced by students from across the ability range in 17 different subjects, each of which has unique specifications for all four levels of the Diploma, is likely to cause problems. A-Level marking is subjected to numerous checks and balances, yet even this is not enough to eliminate arguments about standards and quality assurance. For the fate of Diploma students

³³³ *Hair and Beauty Studies*, AQA Diploma Components, see www.Diplomainfo.org.uk/hair-and-beauty-studies.asp

to be left solely in the hands of teachers (who, in the early stages of Diplomas, will have almost no point of reference) is a real concern.

The decision to assess the project internally in each school is even more remarkable, given the Government's recent decision to scrap coursework in every GCSE subject by 2009. In 2005, Education Secretary Ruth Kelly ordered review of all coursework at GCSE and A-Level after a two-year study by the QCA found "a virtual free-for-all among students, teachers and parents"³³⁴ when it came to completing coursework assignments, as parental assistance and plagiarism from the Internet were found to be widespread. Furthermore, a 2006 survey by the QCA found that 65% of teachers felt coursework "takes time to mark ...[and] it's an extra burden".³³⁵ Do the Government and the QCA believe these problems won't arise with internally assessed project work? What's more, the 'Personal, Learning and Thinking' skills are embedded within the specifications for the Principal Learning but will not be taught or assessed in their own right. Employers will be glad to see them in the Diploma specifications; how this translates into the classroom practice is another matter.

The externally marked sections of the Diploma could cause even more difficulties. Additional/Specialist Learning will consist of existing qualifications such as NVQs and GCSEs that are assessed by the relevant awarding body, in the same way that they would be assessed for students taking the qualifications outside of a Diploma, and will therefore have a reliable base. The Functional Skills component, however, poses a serious threat to the success of Diplomas. As discussed in earlier chapters, the state of literacy and numeracy currently seen in 14-year-olds is dire: 46% of the boys and 34% of the girls who started their GCSEs in 2008 cannot read, write and count to the minimum standard, and in 2008 almost 100,000 pupils (17% of the cohort) began their GCSEs without reaching the minimum standard in any of the core subjects.³³⁶ These students will be the primary audience for the Diploma. Since the Functional Skills test will be pass or fail and students must pass every section of the Diploma, it is conceivable that a large number of students will not be awarded the Diploma on the basis of their performance in this component.

To make matters worse, the grading system for new Diplomas is extremely convoluted. The work experience appears to be little more than a box-ticking exercise, the Additional/Specialist Learning is not graded as it is effectively a separate qualification(s), the Personal, Learning and Thinking skills is not even taught let alone graded, the project has been left open to both plagiarism and parental assistance while the Functional Skills test threatens to deny thousands of students their Diploma. In fact, the only areas of the Diploma that will count towards the final grade are the Principal Learning and the project, with the grade simply aggregating the score from these two areas. The QCA explanation of the Diplomas in March 2008 made it clear that the mark scheme for these areas had yet to be finalised.³³⁷ None of the 'thresholds of achievement' i.e. pass marks for any area of the Diploma, be it Functional Skills or Principal Learning units, had been set before the Diploma programme began nationwide. The QCA also mentioned that there would be 'rules for compensation' allowing high performance in some Principal Learning units to compensate for poorer performance in other units but neglected to explain how this would work in practice.

334 *Exam inquiry as parents and teachers cheat at homework*, The Times, 22nd November 2005, see www.timesonline.co.uk/tol/news/uk/article592759.ece

335 QCA, *Teachers' views on GCSE coursework*, QCA/Ipsos Mori 2006, p.20

336 *GCSE and Equivalent Results in England 2007/08 (Revised)*, DCSF, see www.dcsf.gov.uk/rs-gateway/DB/SFR/s000826/index.shtml

337 QCA, *The Diploma: An Overview of the Qualification*, QCA, London 2008, p.20

The truth is that thousands of students across the country have started a qualification that hasn't even got a marking system, pass marks or grade boundaries in place. What's more, in 2007 AQA told the Select Committee on Diplomas that "it is pertinent to record that all the awarding bodies [for the qualification] are on record as being opposed to awarding Diploma grades because of the risks involved in terms of fairness to students and the credibility of the Diploma",³³⁸ making it clear that the notion of grading the Diploma was opposed by the people who would have to make it work. The only decision that appears to have been made on grading the Diplomas is peculiar in itself. The QCA decided that the different Diplomas should be graded as follows:³³⁹

- Foundation Diploma: A*, A, B or ungraded (U)
- Higher Diploma: A*, A, B, C or ungraded (U)
- Advanced Diploma: A*, A, B, C, D, E or ungraded (U)

With no accompanying justification, each Diploma level will be graded differently from the others. The comparability between levels is a serious issue given that, as ages are not specified for any of the Diplomas, pupils can presumably choose a Foundation or Higher Diploma to begin with and then move onto a Higher, Progression or Advanced Diploma when they have completed their first course. This raises the inevitable question of how much is each Diploma worth relative to other levels in the same subject? For example, how does a grade D in the Advanced Diploma in Engineering compare to a grade B in a Higher Diploma in Engineering? The Diplomas began in September 2008, yet this question remains unanswered.

Problems with assessment are not the only logistical difficulties. The Children, Schools and Families Select Committee was told in 2008 that the "programme of introduction has ...been too fast" and the Committee were "concerned about the practicalities of child protection checks on staff in industry who might be working with Diploma pupils."³⁴⁰ The Select Committee report on Diplomas in 2007 had previously warned about the dangers of forcing through so many new Diploma lines within the first few years of the qualification going live: "it is absolutely essential that ...expansion takes place at a slow and controlled rate, with sufficient time for development and assessment. Too often in the past, initiatives have been rolled out too quickly, with serious negative effects on quality."³⁴¹ This warning was flatly ignored. The pilot study assessing the extended project within the Diplomas was not able to report its findings before the Diplomas had begun in September 2008 and, according to the NFER, the pilot study evaluating the Functional Skills qualification will not be completed before March 2010 – half way through the second cohort of Diploma students and a full 18 months after the first cohort began their courses that include the Functional Skills component.³⁴²

The Government has similarly ignored the rather fundamental issue of whether the pupils will turn up to study their Diplomas. The nature of the qualification requires coordination on a huge scale between schools, colleges, teachers, external lecturers, the careers service Connexions and local authorities because the Diplomas will typically not be delivered in one place. In the national evaluation of how well prepared schools were for delivering the new Diplomas (released in

338 House of Commons Education and Skills Committee, *14-19 Diplomas*, TSO, London 2007, p.30

339 *Marking, Grading and Assessing the Diploma*, QCA, see www.qca.org.uk/qca_13923.aspx

340 House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.81-82

341 House of Commons Education and Skills Committee, *14-19 Diplomas*, TSO, London 2007, p.20

342 *Evaluation of the functional skills pilot*, NFER, see www.nfer.ac.uk/research-areas/pims-data/outlines/evaluation-of-the-functional-skills-pilot.cfm

January 2009, four months after the Diplomas had already started), some alarming trends were identified. In almost all of the case studies, students were expected to travel away from their school for some if not all of the course. Only 4 out of the 15 areas studied had even arranged transport for them (minibus, taxi or bus fares) while 7 other areas left students to travel without any logistical or financial assistance.³⁴³ 2 out of the 15 areas hadn't even managed to arrange a timetable for the students that fitted the delivery of Diplomas with their National Curriculum requirements.³⁴⁴ If a small handful of local areas containing a few thousand pupils cannot coordinate transport and timetables properly, it begs the question of how such a qualification could possibly work at a national level.

This national evaluation also offered a helpful yet troubling insight into why pupils were choosing to study Diplomas and what might be putting other pupils off choosing them.

Over 40% of pupils surveyed in Year 9 (age 14) and Year 11 (age 16) who were not planning to study the Diplomas said that they did know enough about them just months before the national roll-out took place,³⁴⁵ while 32% of Year 9 pupils and 23% of Year 11 pupils who chose not to take Diplomas said: "I did not think a Diploma would help me with my future".³⁴⁶ The survey also found that "many learners, particularly those in Year 11 ... were concerned that Diplomas 'aren't very useful because universities aren't going to take them'. Young people preferred to take other, more traditional courses that they knew would be accepted by [higher education institutions] as illustrated by a Year 11 learner who said: 'I did consider the Diploma, but I was advised that [higher education institutions] value A-levels rather than a Diploma. I think that A levels count for more.'"³⁴⁷ For so many pupils to feel that Diplomas were useless is a damning verdict on how well the Government has marketed this new qualification. The report went on to say their survey "revealed that many had a very limited (and sometimes inaccurate) understanding of what Diplomas would involve. Furthermore, a minority reported that they had 'never been told' anything about Diplomas."³⁴⁸ In short, the survey of pupils shortly before Diplomas were introduced for the first time found clear evidence of confusion surrounding the purpose, structure, relevance and usefulness of Diplomas.

“ If a small handful of local areas containing a few thousands pupils cannot coordinate transport and timetables properly, it begs the question of how such a qualification could possibly work at a national level ”

Universities and employers speak up against Diplomas

A year before the Diplomas were taught in schools for the first time, over 60% of universities said that they did not see Diplomas as a 'suitable alternative' to A-Levels.³⁴⁹ This news was countered in May 2008 by UCAS announcing that over one hundred universities and colleges were 'accepting' the Diplomas, although on closer inspection many of these institutions merely stated that 'applications will be considered on their individual merits' rather than confirming that Diplomas were equivalent to A-Levels or other qualifications.³⁵⁰ Alongside this announcement, the influential Russell Group of leading universities tacitly backed Diplomas but only those studied at Advanced level, and stated they were "concerned to ensure that the Diploma sufficiently equips candidates with the skills and knowledge they need

343 O'Donnell L et al, *National Evaluation of Diplomas Preparation for 2008 Delivery*, NFER, Slough 2009, p.57

344 Ibid p.58

345 Ibid p.94

346 Ibid p.94

347 Ibid p.96

348 Ibid p.96

349 *Universities have Diploma doubts*, BBC News, 27th July 2007, see news.bbc.co.uk/1/hi/education/6917842.stm

350 *Statements from universities and colleges about the Diploma*, UCAS, see www.ucas.com/students/beforeyouapply/diplomas/14-19diplomas/statements

to flourish on our courses”.³⁵¹ Cambridge University declared that the only Diploma they were willing to consider was Engineering and only on the condition that it was studied at Advanced level alongside “appropriate options” (i.e. A-levels) in the Additional/Specialist Learning.³⁵² Similarly, Oxford University were only willing to accept an Advanced Diploma in Engineering “provided candidates also obtain both an A-level in Physics and the new Level 3 Certificate in Mathematics for Engineering.”³⁵³ The sole independent school to engage with Diplomas is Wellington College and they are only offering Engineering.

The response from employers has been equally lukewarm. As far back as 2006, Education Secretary Ruth Kelly accepted that the ten days work experience may not be directly relevant to students’ courses after the QCA announced that they were “not confident” that employers and schools could find sufficient placements in the required fields.³⁵⁴ Professor Alan Smithers has argued that this “generalising to the notion of work-related experience rather than actual work experience both undermines the original concept and imposes an unnecessary burden.”³⁵⁵ The question of whether local employers will be able to provide the considerable volume of work experience required should the Diploma programme be rolled out in 17 subjects nationwide has not been addressed by the Government, even though the burden will fall mostly on small and medium-sized companies during the current economic recession. Richard Lambert, Director-General of the CBI, attacked Diplomas on the grounds that they could create a “fractured two-tier education system” as private schools would continue to opt for GCSEs, A-levels or the International Baccalaureate while state schools relied on Diplomas.³⁵⁶ At the same time as expressing “genuine enthusiasm for the sector-specific, vocational Diplomas”, he criticised the plans to introduce science, humanities and language Diplomas as they risked “undermining the integrity of these traditional academic subjects” and he was also worried that the “over-loaded education system” may not be able to cope with the Diplomas because of a lack resources for schools and poor careers advice.

Given all of the above, it is understandable that universities, employers and politicians have grave concerns about the future success of the Diplomas. Therefore it came as no surprise that the demand for the new Diplomas in September 2008 was extremely low. After the Schools Minister Jim Knight predicted that the take-up would be 50,000 and Jon Coles, Director of the 14-19 reform group at the Department for Children, Schools and Families, predicted take-up “in the region of 160,000”,³⁵⁷ just 11,490 pupils across the entire UK signed up to the first phase of the Diplomas.³⁵⁸ It has since been discovered that in some areas of the country fewer than ten students are studying the Diplomas,³⁵⁹ and of the 11,490 that began their Diplomas last year only 1,416 students are studying them at Advanced level – the only level seen as equivalent to A-Levels.³⁶⁰ The exam boards responsible for the qualifications have also started to raise doubts, despite their significant investment in the qualifications. Dr Mike Cresswell, director general of the Assessment and Qualifications Alliance (representing the largest examination boards), said in November 2008 that he did not believe the Diplomas were the kind of qualification “youngsters actually want”.³⁶¹ Jerry Jarvis from EDEXCEL told the Children, Schools and Families Select Committee that teachers would only receive three days’ training before the September 2008 Diploma roll-out,³⁶² and a survey in March 2008 by the ATL

351 *More universities back Diplomas*, BBC News, 21st May 2008, see news.bbc.co.uk/1/hi/education/7410917.stm

352 Ibid

353 *Statements from universities and colleges about the Diploma*, UCAS, see www.ucas.com/students/beforeyouapply/diplomas/14-19diplomas/statements

354 *Problem over Diploma work stints*, BBC News, 22nd February 2006, see news.bbc.co.uk/1/hi/education/4740742.stm

355 Smithers A & Robinson P, *The Diploma: A disaster waiting to happen?*, Centre for Education and Employment Research, University of Buckingham 2008, p.24

356 *CBI attacks new Diploma plans*, The Daily Telegraph, 22nd June 2008, see www.telegraph.co.uk/news/newstopics/politics/education/2176362/CBI-attacks-new-Diploma-plans.html

357 *Diploma takeup lower than hope*, BBC News, 21st May 2008, see news.bbc.co.uk/1/hi/education/7412098.stm

358 *Only 12,000 have started the Diplomas*, BBC News, 13th October 2008, see news.bbc.co.uk/1/hi/education/7668045.stm

359 *Fresh blow for Diploma qualifications*, The Daily Telegraph, 13th November 2008, see www.telegraph.co.uk/education/secondaryeducation/3453059/New-blow-for-Diploma-qualifications.html

360 *Only 1 in 6 take top Diploma level*, Financial Times, 6th January 2009, see www.ft.com/cms/s/0/403cff9e-dc24-11dd-b07e-000077b07658.html?nclink_check=1

361 *Exams chief casts doubt on Diplomas*, The Independent, 18th November 2008, see www.independent.co.uk/news/education/education-news/exams-chief-casts-doubt-on-Diplomas-1023104.html

362 House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.80

found that 55% of teachers thought they had not been given enough training and nearly 40% said their school or college didn't have enough classroom space or available teachers for the Diplomas.³⁶³

A low take-up coupled with serious reservations from universities and employers hardly inspires confidence in the future of the Diplomas. When giving evidence to the Select Committee, Jerry Jarvis warned that “if the Diploma doesn't earn its spurs as a qualification, and that means respect from employers, pupils, parents and higher education, we face a serious problem.”³⁶⁴ In one of the most candid ministerial admissions in recent years, Alan Johnson warned that the Diplomas “could go horribly wrong” during his time as Secretary of State for Education.³⁶⁵ The opposition parties have also been extremely critical of Diplomas, putting a question mark over their long term survival. The Conservative Party have said they will scrap the three academic Diplomas scheduled for introduction in 2011³⁶⁶ and the Liberal Democrats would scrap the Diplomas altogether.³⁶⁷ The £300 million of additional investment in Diplomas scheduled for 2008-2011³⁶⁸ at a time of public service cuts gives detractors another strong argument.

An effective part academic-part vocational route for 14-year-olds, focusing on subjects that genuinely fit this niche, has considerable potential to engage learners and address the skills shortages in the UK. Even so, the Diplomas in their current form are not the answer. In February 2009, Ed Balls was still insisting that Diplomas can “give young people the knowledge they need to go onto university, work or an apprenticeship with the right combination of academic rigour and practical learning”,³⁶⁹ yet the reality is that the Diploma has been designed in such a way that it risks cutting students off from both further study and employment.

363 *Diplomas forge ahead while teachers left behind*, The Guardian, 19th March 2008, see www.guardian.co.uk/education/2008/mar/19/schools.uk6

364 House of Commons Children, Schools and Families Committee, *Testing and Assessment – Volume 1*, TSO, London 2008, p.79

365 *Diplomas 'may go horribly wrong'*, BBC News, 9th March 2007, see news.bbc.co.uk/1/hi/education/6435563.stm

366 *Tories would scrap some Diplomas*, BBC News, 19th September 2008, see news.bbc.co.uk/1/hi/education/7625483.stm

367 *More concern at Diploma operations*, BBC News, 6th October 2008, see news.bbc.co.uk/1/hi/education/7655465.stm

368 Hansard, 10th December 2008, Column 183W

369 *New Diplomas in Humanities, Science and Languages filled with opportunities for practical learning*, DCSF press release, 9th February 2009, see www.dcsf.gov.uk/pns/DisplayPN.cgi?pn_id=2009_0027

8

Young Apprenticeships

Although the concept of an ‘apprenticeship’ – an individual skilled in a craft passing on knowledge and skills to the next generation – has been around for centuries, the post-war decline of manufacturing industry in the UK significantly reduced their availability. The concept was revived in 1994, which saw the re-launch of the apprenticeship brand as ‘Modern Apprenticeships’ that lead to NVQ Level 3,³⁷⁰ equivalent to A-Levels. The costs were shared between the employer and the state, and employers contributed to the design of the apprenticeships. Initial take-up of the new Modern Apprenticeships was very encouraging, with enrollment shooting up from 24,800 in 1996 to 131,400 by 2000,³⁷¹ but this number has been steadily falling ever since and was 100,000 by 2006.³⁷² This has been due in part to the introduction of the Foundation Apprenticeship leading to NVQ Level 2 and the Modern Apprenticeship being renamed as an ‘Advanced Apprenticeship’. Level 2 apprenticeships have grown in popularity to 150,000 in 2006, meaning that the total number of Level 2 and 3 apprenticeships is approximately 250,000 a year.

The Government is keen to expand the apprenticeship programme. March 2008 saw the release of a joint publication between the DCSF and the Department for Innovation, Universities and Skills (DIUS) entitled “Raising Expectations: Enabling the system to deliver”,³⁷³ in which the Government stated that “from 2013 every suitably qualified young person should be entitled to an Apprenticeship place.”³⁷⁴ This entitlement will be overseen by a new National Apprenticeship service (NAS).³⁷⁵ The aspiration is for apprenticeship numbers to hit 400,000 by 2020, though that target is far less likely to be met now that the economy is contracting.³⁷⁶ To support these proposals, central funding for apprenticeships is set to reach £1 billion by 2010/11.³⁷⁷ The popularity of apprenticeships has not escaped the Conservatives who are vowing to create an extra 100,000 apprenticeship places.³⁷⁸ There seems to be a general consensus behind all the headlines and the press releases that apprenticeships can offer a valuable route into key industries. Back in 2001, the Modern Apprenticeship Advisory Committee noted that “being paid, achieving a recognised qualification and securing employment were particularly important for young people who were not expecting to perform well in GCSEs.”³⁷⁹

With this in mind, the Government took the welcome step of offering apprenticeships to 14-year-olds for the first time in 2004 in a new ‘Young Apprenticeships’ (YA) scheme.³⁸⁰ The driving force behind this scheme was that the flexibility for this age group needed to be improved. For a long time, class-

370 House of Lords Select Committee on Economic Affairs, *Apprenticeships: a key route to skill – Volume 1*, TSO, London 2007, p.13

371 DCSF, *Education and Training Statistics for the United Kingdom*, DCSF Publications, HMSO, London 2008, p.51

372 House of Lords Select Committee on Economic Affairs, *Apprenticeships: a key route to skill – Volume 1*, TSO, London 2007, p.13

373 DCSF/DIUS, *Raising Expectations: enabling the system to deliver*, TSO, Norwich 2008

374 Ibid p.9

375 DCSF/DIUS, *World-class Apprenticeships: Unlocking Talent, Building Skills for All*, TSO, Norwich 2008, p.27

376 Ibid p.5

377 Ibid p.11

378 Cameron pledge on apprenticeships, BBC News, 23rd July 2008, see news.bbc.co.uk/1/hi/education/7521089.stm

379 House of Lords Select Committee on Economic Affairs, *Apprenticeships: a key route to skill – Volume 1*, TSO, London 2007, p.14

380 14-19 education and skills: Young Apprenticeships, DCSF, see www.dcsf.gov.uk/14-19/index.cfm?sid=3&pid=342&lid=321&ctype=Text&ptype=Single

room qualifications – GCSEs, GNVQs, Vocational GCSEs or the new Diplomas – remained the only option for 14-year-olds. An alternative was needed to engage young people uninterested in this form of learning. As Modern Apprenticeships had proved reasonably popular, opening up access to similar schemes at a younger age was a logical step.

The distinctive feature of YAs is the depth of workplace experience – at least 50 days over the two-year programme. Over these two years, pupils would also study for Level 2 qualifications (equivalent to GCSEs) at the same time as completing the statutory National Curriculum requirements such as GCSEs in English and Mathematics. YAs were designed to ease the transition into an Advanced Apprenticeship at age 16, should a pupil wish to pursue this route. Numerous attempts have been made to bolster the credibility of YAs.³⁸¹ Sector Skills Councils (SSCs), consisting of employer representatives from each industry sector, were involved in designing and supporting their respective programmes and the SSCs have endorsed the national Young Apprenticeship Certificates awarded on successful completion of the scheme. The Learning and Skills Council currently funds the apprenticeships via local authorities who in turn commission ‘YA Delivery Partnerships’ – a small dedicated team that organises and coordinates the employers, training providers and schools to suit local needs as well as evaluating the schemes.

Numbers accessing YAs have risen steadily if unspectacularly from 1,000 pupils to 9,000 by September 2007³⁸² and the novel structure of YA courses, namely that pupils spend two days a week outside school with a training company of employer (Table 6), has almost certainly contributed to this.

Table 6: Structure of the Young Apprenticeship scheme

SCHOOL 3 days a week	EMPLOYER/TRAINING PROVIDER 2 days a week
Pupils study statutory GCSE subjects:	Pupils aim for Level 2 qualifications in:
● English	● Art and Design
● Mathematics	● Business and Administration
● Science	● Construction
● ICT	● Electricity and Power
	● Engineering
Pupils must also complete other statutory	● Food and Drink Manufacturing
National Curriculum requirements:	● Hairdressing
● Citizenship	● Health and Social Care
● Physical Education	● Hospitality
● Sex and Relationships Education	● Leadership and Coaching
	● Motor Industry
	● Performing Arts
	● Retail
	● Science
	● Sports Management

381 *Young Apprenticeships - Essential guide to the key elements of Young Apprenticeship programme*, Skills Active, see www.skillsactive.com/training/apprenticeships/young-apprenticeships

382 *14-19 education and Skills: Young Apprenticeships*, DCSF, see www.dcsf.gov.uk/14-19/index.cfm?sid=3&pid=342&lid=321&ctype=Text&ptype=Single

YAs are open to all pupils although they need to demonstrate that they are capable of achieving Level 2 qualifications, hence the following criteria for pupils:

- Attendance and behaviour at the average level for Year 9 at the pupil's school
- Evidence that the parents or guardians support the pupil's choice
- Key Stage 2 SATs at Level 4 or higher in maths, science and English

Or

- A combined Key Stage 3 Teacher Assessment Score of 14 or higher

In exceptional circumstances, pupils who fail to meet the criteria can be allowed onto the course. The local YA Delivery Partnership is then responsible for timetabling and curriculum management, which inevitably becomes more complicated when pupils spend time out of schools. The work experience is a fundamental part of the YA scheme and employers are required to provide a high-quality placement (such as learning and practicing technical skills where appropriate) and offer the prospect of moving onto an apprenticeship at age 16 should the pupil wish to do so. As the YA Delivery Partnership organises the timetabling at a local level, the work experience can be taken as regular days per week or in larger blocks. As part of the arrangement, employers are expected to appraise the performance of pupils and provide regular feedback on both the pupil and the quality of the programme.

Praise from OFSTED

According to OFSTED's review of the YA's first three years, involving around 15-20 YA Delivery Partnerships, the programme is proving very successful. In terms of student achievement:³⁸³

- "in all but two partnerships in 2006/07, there was no underachievement and students were on track to achieve level 2 qualifications"
- "students' knowledge and understanding of the vocational sector were good or better in half the partnerships inspected"
- "Students' personal development was good in all but two partnerships visited in 2006/07 and never inadequate ...[which] has been a major strength throughout the first three years of the programme and continues to improve"
- "attendance was good in all partnerships inspected and behaviour was never less than satisfactory"
- "students spoke very highly of the provision, which they enjoyed a great deal ...[because] they were treated more like adults, took pride in their work and went on work placements"
- "In all but one partnership inspected in 2006/07 students took advantage of the opportunities for independent learning ...[and] teachers noted that young apprentices took more responsibility for their own learning than their peers in school did"

383 OFSTED, *The Young Apprenticeships programme 2004-07: an evaluation*, OFSTED Publications, London, p.7-8

OFSTED went on to congratulate teachers and trainers for their impressive subject knowledge³⁸⁴ and the monitoring of progress through assessment and providing feedback was commended.³⁸⁵ Employers' positive perceptions of the YA programme and their high level of involvement were also highlighted by the inspection team, and the employers were generally very enthusiastic about the programme.³⁸⁶

Nevertheless, OFSTED raised some concerns about YAs. Only a few of the YA Delivery Partnerships were found to be setting challenging targets for students and using individual learning plans effectively. The timetabling and recruitment procedures (e.g. offering visits to local colleges that run the courses) had run into some difficulties in the initial years of YAs but these problems were now being resolved. In short, the overall assessment of YA was very promising. Ironically, YAs have helped meet the demands aired in the Tomlinson Review for a stronger, more coherent and more manageable vocational route to a far greater extent than the new Diplomas, even though the Diplomas have received considerably more political and financial investment.

The potential pitfalls for the Young Apprenticeship scheme

An obvious problem with the programme in its current form is the entry criteria, which were designed to ensure that only academically successful pupils could be accepted onto the course. The OFSTED report acknowledged that the YAs are aimed at "students of average or above average ability",³⁸⁷ yet these are by definition not the students most likely to have become disengaged from regular schooling. While it's important that students choosing this route are properly motivated, barring students with a poor academic record from taking part in YA is arguably punishing those students who are most in need of this sort of programme.

Furthermore, the relationship of YAs to the new Diplomas is unclear. For the 2008 YA cohort, the 9,000 places were split into two groups: 7,000 places were set aside for students to pursue qualifications approved by the SSCs (the standard route) and the remaining 2,000 places were reserved for a pilot of YAs using components from the new Diploma as the underpinning qualifications.³⁸⁸ The aim of this was to "develop a means of delivering Young Apprenticeships through the reformed qualifications landscape" after the introduction of the Diplomas as well as helping to "develop delivery models of Diplomas that are likely to be towards the higher end of the spectrum in terms of practical learning content".³⁸⁹ The extended work experience remains a point of distinction between the Diplomas and YAs, but this move by the Government opens the possibility of the YA scheme being incorporated into the Diploma framework – a move that would be damaging given the benefits of how much benefit YAs place on workplace learning.

Other obstacles lie ahead. In 2008 the Learning Skills Council (LSC), who fund the YA programme, became yet another high-profile victim of the constant re-organisation in the skills policy sector. The DCSF/DIUS publication "Raising Expectations"³⁹⁰ outlined the roles and responsibilities of a new Skills Funding Agency and Young People's Learning Agency that, along with the National Apprenticeship Service, will replace the LSC in due course. Local authorities will have a new duty to arrange suitable provision up to the age of 18 rather than 16,

384 Ibid p.9

385 Ibid p.10

386 Ibid p.13

387 OFSTED, *The Young Apprenticeships programme 2004–07: an evaluation*, OFSTED Publications, London, p.16

388 *Young Apprenticeships – National and Regional Proposal Handling and Processes Guidance*, Skills Active, see www.skillsactive.com/training/apprenticeships/young-apprenticeships

389 *Update for consortia delivering Diplomas in 2008*, DCSF Newsletter, 3rd October 2007, see www.teachernet.gov.uk/_doc/11977/newsletter.html

390 DCSF/DIUS, *Raising Expectations: enabling the system to deliver*, TSO, Norwich 2008

meaning that all apprenticeships including the YA programme will now be funded and delivered at a local level. The demise of Connexions, the £450 million-a-year careers service for 13 to 19-year-olds, also leaves YAs in a state of educational limbo as the duty for providing a careers service has been passed to local authorities and colleges.³⁹¹ Taking control of course funding and providing a high-quality careers service will be a huge undertaking for local authorities. Funding for YAs was reduced by two-thirds while the LSC was in control of the programme, as they expected schools to fund the activities to an ever greater degree³⁹² – an issue that local authorities will have to grapple with in due course. Whether the YAs survive this period of transition intact and properly funded, given that they are not a core priority, remains to be seen, particularly as Diplomas represent a much easier and cheaper investment. The Skills Commission suggested in March 2009 that funding for the YA scheme should be ring-fenced³⁹³ but this has yet to be adopted by the Government.

Judging by the experience of the YA programme, the success of educational initiatives seems inversely correlated to the amount of political will and financial resources expended. The much-hyped and as yet entirely unproven and risk-laden Diploma programme, supporting 11,500 learners, has been lavished with £300 million over the next three years while funding for 9,000 YA students over the next two years is under £60 million.³⁹⁴ Indications that the YA scheme will become increasingly intertwined with the Diplomas do not bode well for the future of this valuable programme.

391 *Teenagers let down by 'patchy' careers advice*, TES, 6th October 2006, see www.tes.co.uk//article.aspx?storycode=2294678

392 The Skills Commission, *Progression through apprenticeships*, The Skills Commission, London 2009, p.26

393 *Ibid* p.26

394 *Young Apprenticeships – National and Regional Proposal Handling and Processes Guidance*, Skills Active, see www.skillsactive.com/training/apprenticeships/young-apprenticeships

9

Secondary recommendations

The KS3 Strategy, much like its primary counterpart, has been an expensive failure. It has cost around £100 million a year since 2002 but there has been no improvement whatsoever in performance. It has failed for the same reasons as the PNS but it has the additional disadvantage of lacking the focus on basic skills. We would not only scrap this Strategy but also significantly reduce the curriculum demands in terms of the number of subjects that schools are required to teach. This is not because we do not appreciate the importance of a broad and balanced curriculum, rather that some children require a more intensive focus on basic skills than the current curriculum allows for.

In 2008 the purpose of KS3 was further thrown into confusion with the sudden collapse of SATs at age 14. This has left a gaping hole between the end of primary school and the GCSE years that schools are struggling to fill. Because the removal of SATs was not planned in advance of the ETS marking fiasco, no thought was given to what should replace them in the first three years of secondary school. Although schools may have chosen to continue with SATs up to summer 2009 as they had already started the final year of KS3 before SATs were scrapped, the decision about what to do in September 2009 is still wide open. At the time of writing, several months after SATs at age 14 were abolished, the Government have not decided what they want to see these SATs replaced by - leaving KS3 without a specific objective or purpose.

We argue that it should be used to help students make decision about their post-14 pathway. Instead of a one-off assessment at 14, a comprehensive profile should be developed to guide parents and their children. This means that far more clarity is needed about the post-14 options and our final recommendations explore how this could be achieved given the tremendous confusion and complexity in the qualifications system at the moment.

“ Instead of a one-off assessment at 14, a comprehensive profile should be developed to guide parents and their children ”

1. The Secondary National Strategy should be scrapped and schools should be given extra resources and time to focus on children still struggling with literacy and numeracy

Scrapping the KS3 National Strategy would save £100 million that could be used by schools to buy in specialist support for children still struggling with reading, writing and maths. This could be allocated on the same basis as money for primary schools – by attaching it to approved programmes. In this case money would

only be available for children who had not yet met the minimum standards when leaving primary school. Last year 28% of pupils failed to achieve Level 4 in English and mathematics at the end of primary school, which amounted to 163,000 children. £100 million would therefore translate into an additional £615 for each pupil that has fallen behind. As fewer and fewer children left primary school without the basic skills, this money to secondary schools could be focused on an ever narrower group.

We also recommend that all schools are given full control over their curriculum at KS3. The first wave of academies were allowed to choose what subjects they taught and we believe this freedom should be extended to every secondary school. The National Curriculum should become the default choice, rather than a statutory obligation. This would allow schools in which a high proportion of students are still having problems mastering literacy and numeracy the freedom to focus on these problems. One common trait of many of the most successful academies is that they have used their freedom to narrow the curriculum for this group of students. While a broad curriculum entitlement is beneficial for most pupils, and would continue to be the norm, the insistence that every pupil must continue to pursue a huge list of statutory subjects up to the age of 14 is hard to justify while standards in core skills remain so low.

2. Develop a new profile for children completing KS3 which would help them to decide which post-14 pathway to follow

As discussed in the next recommendation, we envisage that three clear routes should be available at the end of KS3: Academic, Applied and Vocational. The three years at the beginning of secondary school should therefore be a period in which schools begin to identify each pupil's interests and strengths. In order to give pupils the necessary information for making appropriate choices at age 14, a new 'Pupil Profile' should be introduced. Pupils are currently awarded little more than their SATs results (and not even that any more) and a National Curriculum level in their subjects, providing an inadequate set of information on which to make key decisions. The SATs and National Curriculum levels are too narrow and they wrongly assume that a single number can encapsulate everything that a pupil has achieved in that subject over the previous three years.

The educational charity 'EDGE' (one of the sponsors of this report) has recently recommended a 'Pupil Profile'³⁹⁵ and we believe that it presents a workable suggestion for how the profile with three core elements might operate:

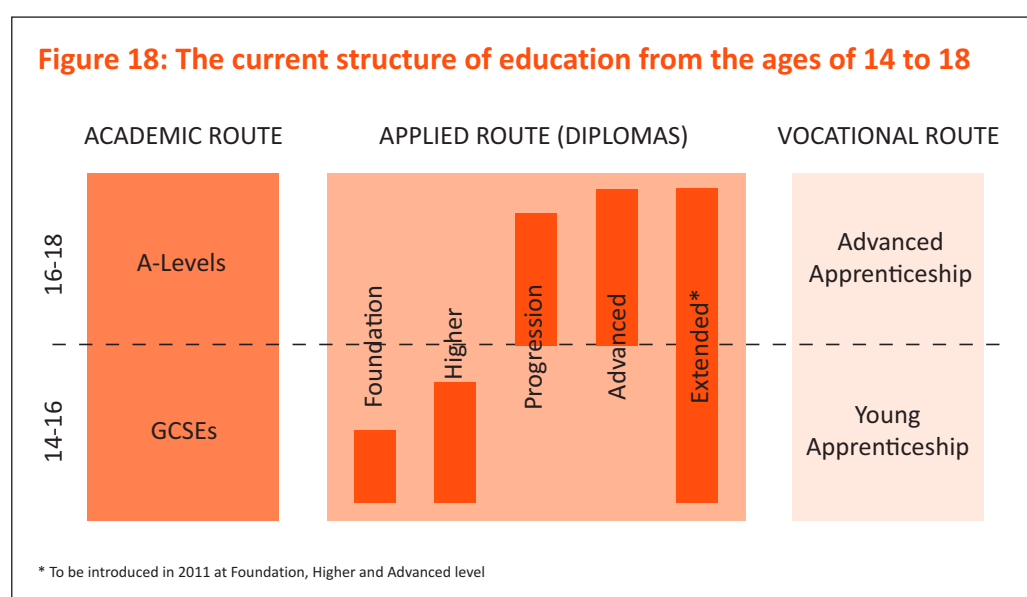
- Regular basic skills tests (literacy and numeracy) would be done throughout KS3 and the results reported on the profile
- Attainment in other subjects would also be included in the profile but with a greater focus on skills (e.g. teamwork, problem solving) rather than grades. This would revolve around a combination of formal and informal assessments of these skills as well as providing feedback for the pupils.
- A record of the child's interests and motivation. This would be written and updated by the student, parents and right across KS3 at any time by any of them, with the possibility of including results from psychometric tests to provide a fuller picture of each pupil's strengths.

395 *Six Steps To Change Manifesto 2009*, EDGE, see www.edge.co.uk/Pages/ResearchDetail.aspx?ContainerID=602&ContainerName=Research

These three elements – subject attainment, life skills and interests – would form a full and accurate picture of every individual pupil. This profile could also contain information such as attendance records and behaviour ratings. In order to keep a lid on bureaucracy, the content of the profiles would be limited while the monitoring itself should be done electronically. Once completed, face-to-face discussions between pupils, parents, teachers and careers advisors would need to take place to decide which of the three routes the pupil should concentrate on over the next two years. Pupil profiling across KS3 would remove the need for formal testing as formative assessment and classroom observations will provide all the necessary performance information and national sampling would give information about national standards. Data from GCSEs and other formal qualifications would, of course, still be made available for prospective parents to make decisions about secondary schools.

3. Create three distinct routes from 14 to 16

The following three recommendations are designed to create a tripartite model of education from age 14 to 16 (which would then be carried on from 16-19). The aim is to bring clarity of purpose to schools, students and parents that is sorely lacking at present. Each of the three routes – Academic, Applied and Vocational – require some reform to make them fit for purpose. Figure 18 gives an indication of the current situation from age 14 to 18, illustrating the confusing and complicated landscape that pupils and parents must navigate.



(a) Bolster the academic route at age 14

As explored in Chapter 6, the credibility of GCSEs has suffered enormously in recent years. Standards have slipped to the point where a GCSE grade now is worth almost a grade less than it was a decade ago. After years of debatable standards and the incremental creep of vocational courses into the same space inhabited by GCSEs, a new approach is required to inject greater credibility and integrity back into academic studies at the age of 14.

Our first recommendation is to pass control of GCSE examination standards to the new Standards Agency which would replace OFQUAL (outlined in Chapter 4 in our 'Primary Recommendations'). By having an independent regulator run by school, business and university representatives, the incentive to lower grade boundaries in the name of increasing pass rates will be mitigated. The QCA's recent decision to allow schools to choose the iGCSE,³⁹⁶ a qualification that closely resembles the old O-Level course, is welcome as it is widely thought to provide a sterner challenge for more able pupils. However, at the time of writing the DCSF has yet to confirm whether they will allocate funding for this qualification, suggesting that they are not overly keen on the idea of having competing qualifications within the state sector.

Our second recommendation is to restore the academic underpinnings of all academic subjects. This requires a sharp reversal of recent trends which have seen an emphasis on 'functionality' and 'literacy' (in the broader sense of the word) rather than a deep understanding of underlying methodologies. In the past few years we have seen the introduction of new science GCSEs that have been widely criticised by university professors and employers for their lack of scientific content. The same now appears to be happening with GCSE Mathematics. We believe that an independent Standards Agency run by a board made up of representatives from higher education and key employment sectors would be in a strong position to demand a higher level of core knowledge content in qualifications. But the two pre-requisites of such changes are that fewer children start their GCSE courses without mastering basic skills and that strong Applied and Vocational routes are available for students for whom academic courses are not appropriate or desired.

(b) Simplify the structure of Diploma programme

The complexity built into the Government's new Diploma programme is simply staggering. There are four (soon to become five) different categories of Diploma in each of the 17 lines of learning. In addition, each of the four categories has a separate syllabus within each line of learning, each syllabus contains a large number of specialisms that pupils can select from, each individual Diploma is made up of six constituent parts (many of which are not graded or even assessed) and each of the four Diploma categories are expected to take different lengths of time to complete. To compound the bewildering maze of options, the four categories of Diplomas are arranged in parallel without any ages specified for starting or completion, as opposed to the serial routes for both academic and vocational studies. This creates a huge number of possible permutations from age 14 to 18 that schools must cater for in terms of coordinating timetables, transport and the delivery of various course components, which presents serious difficulties for the local partnerships of schools, colleges and employers that deliver the Diplomas.

Nevertheless we do believe that there is an argument for an Applied pathway from 14-19 for subjects that are neither completely academic nor completely vocational. A Diploma structure could be suitable for this as it allows for different components to be built into a single qualification, but the current model needs to be drastically simplified if it is to perform this role. To this end, we recommend the following changes to the Diplomas:

396 International GCSEs 'can be offered in state schools', The Telegraph, 10th February 2009, see www.telegraph.co.uk/education/4571591/International-GCSEs-can-be-offered-in-state-schools.html

1. Move from a 'parallel' to a 'serial' structure

At present, there are four categories of Diploma within each subject – Foundation, Higher, Progression and Advanced. These categories run alongside each other so that pupils can choose which category they start with and how long they spend on each category. We propose moving from a 'parallel' system to a 'serial' one, in which one Diploma is studied from 14-16 and a second Diploma is studied from 16-18. The 14-16 Diploma would be named a 'Foundation' Diploma and the 16-18 companion would be an 'Advanced' Diploma.

2. Use existing Diploma content to create the new 'Foundation' and 'Advanced' Diplomas

To move across from a set of parallel Diploma categories into this new structure, it would be sensible to use the existing Diploma content as much as possible. The new 'Foundation' Diploma at age 14 should therefore be based largely on the current 'Higher' course which takes 18-24 months to complete, and the new 'Advanced' Diploma at age 16 can be based on the current 'Advanced' course which takes approximately 24 months.

3. Reduce specialisation options, particularly in the new 'Foundation' Diploma at age 14

Within this new three-route structure for our education system, it is important that some flexibility is retained. In addition, the qualifications themselves must be beneficial without becoming overly complicated. The current Diplomas allow pupils to specialise very early on in the course, even within courses that cover a relatively narrow field of employment. For example, the 'Creative and Media' Diploma has 80 different options for specialisation at the most basic level, let alone when it becomes more advanced. While the content must clearly be relevant at all ages, this degree of specialisation within an already specialised qualification creates a huge burden for schools, colleges and other learning providers who must offer all these options. We propose having a standardised syllabus in every Diploma subject from 14-16 and only allowing specialisation (delivered through NVQs, BTECs, OCR Nationals, City and Guilds and other relevant qualifications) at age 16, so that pupils retain a broad understanding of the subject area before choosing which particular niche they wish to pursue in employment or further education.

4. Simplify the grading system for Diplomas

With all the major examination boards on record as opposing grades being awarded for Diplomas, the QCA's bizarre grading system in which different grades get awarded at different Diploma levels complicates an already confusing picture. Only two out of the six components of Diplomas (Principal Learning and the project) count towards the final grade, and the precise marking system and grade boundaries are still undecided. We propose dropping the grading altogether and moving to a simple 'Distinction/Pass/Fail' system. Seeing as much of the Diploma is currently excluded from the final grades, it makes more sense to include all of these presently ignored components as a simple Pass-Fail exercise within the overall Diploma (the Functional Skills test and work experience are broadly in this format) while still allowing for excellent achievement in the main body of the course to be recognised with a Distinction.

5. Remove references to 'Guided Learning Hours'

In Chapter 7, the table outlining the current structure of Diplomas made constant reference to 'Guided Learning Hours' (GLH), which comes with the embarrassingly loose definition of "all times when a member of staff is pres-

ent to give specific guidance towards the learning aim being studied on a programme”.³⁹⁷ This term makes Diplomas appear more complicated than they really are, particularly when compared to a straightforward GCSE syllabus. Therefore we propose scrapping references to GLH and reverting to a set syllabus, which includes the skills and knowledge to be learnt across the course.

One of the major benefits of switching to a more structured Diploma route is the increased flexibility that it will offer. Expecting every pupil to make the right choice about which of the three routes to pursue at age 14 would be unrealistic, so it is essential that they are able to move between routes at age 16 and 18. By turning the Diplomas into two-year courses and having identical length courses available in the Academic and Vocational routes, pupils will be able to move between routes with much greater ease than they would if they were forced to study several different Diplomas of various lengths over an undefined number of years. Moreover, by making the above changes it would mean that both the ‘Foundation’ and ‘Advanced’ Diplomas (and their equivalent Young Apprenticeships) would become

stand-alone qualifications, allowing them to be integrated into Further and Higher Education programmes and offered to learners of all ages.

In addition, we believe that ten days of work experience for Diplomas is inadequate, especially when it does not have to bear any relation whatsoever to the Diploma being studied. The practical implications of arrang-

ing high-quality relevant work experience for so many pupils are not necessarily insurmountable, but the speed at which the Diploma programme has been introduced leaves little prospect of finding sufficient (and beneficial) placements. Ideally the numbers of day spent in the workplace would be increased to around 25 days over the two-year course – exactly half the amount of workplace training for Young Apprenticeships – although it may be necessary to offer financial incentives for employers to offer additional work placements.

“ One of the major benefits of switching to a more structured Diploma route is the increased flexibility that it will offer ”

(c) Expand the vocational route at age 14

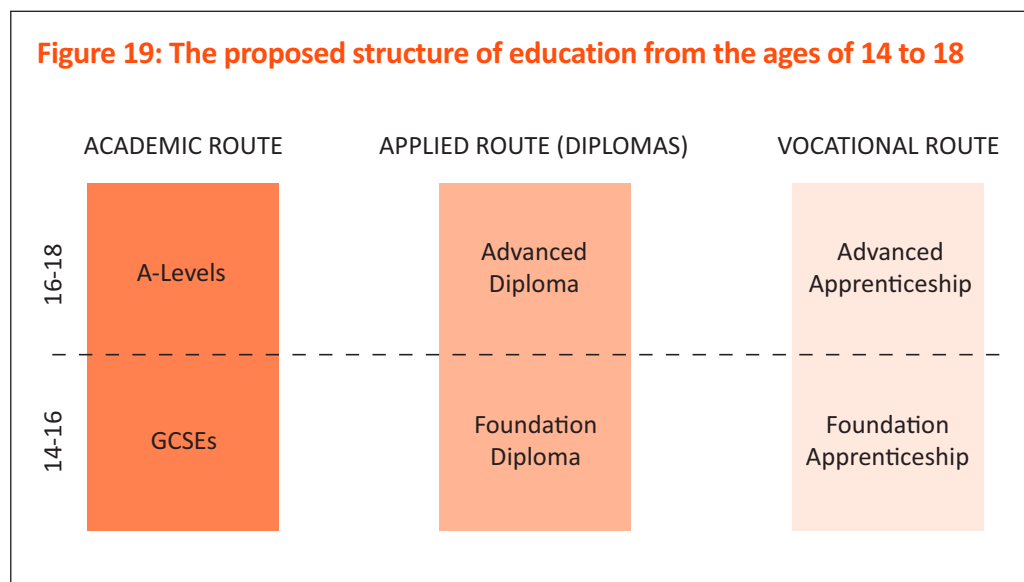
Of all the initiatives introduced into our education system over the past ten years, the Young Apprenticeship (YA) scheme has been one of the most successful. By spending three days a week in school and two days in the workplace, pupils have gained skills and experience that have prepared them for the workplace while still ensuring that they develop core skills in school. OFSTED was extremely impressed by YAs when they reported on the first four years of the scheme and the pupils completing their apprenticeships also gave very positive feedback. However the YAs is that the scheme is extremely small at the moment, with just 9,000 pupils being able to access the apprenticeships across the whole country each year – less than 1.5% of the national cohort.

We recommend that YAs are rolled out properly as a national scheme to create a genuinely vocational route at age 14. At present, the scheme is funded by the Learning and Skills Council even though the DCSF fund the rest of 14-16 education (via local authorities). We suggest that the funding is passed to schools

397 Guided Learning Hours (GLH) Business Definition 2008/2009, Learning and Skills Council, see www.lsc.gov.uk/providers/Data/dictionary/businessdefinitions/GLH.htm

through the standard funding formula and that schools should then pass money on to employers where appropriate. Funding YAs via the standard school budget delegated to local authorities would also assist with coordinating delivery through local business partnerships, which is a key aspect of the programme. The new National Apprenticeship Service (NAS), being set up as part of the machinery that will follow the closure of the Learning and Skills Council in 2010, would be ideally placed to take responsibility for expanding the scheme through working with local authorities, the DCSF and major employers to provide the necessary logistical support.

One of the greatest concerns regarding YAs is that, rather than develop into a separate vocational route, they might be sucked into the Diplomas, creating further confusion. It is imperative that YAs are kept separate from Diplomas as they should serve entirely different purposes by offering different kinds of courses for different styles of learning. We also think it is important that YAs be made accessible to a wider group of young people, which would require the academic entry criteria to be lowered. While there is a danger that in doing so the qualification would be debased, it is likely that many of the candidates for which practical learning is most appropriate will have already become alienated from formal academic learning before 14. It would be far more suitable for such students to take YA courses than to be forced to sit GCSEs. For the same reasons we would argue that insisting that pupils in the YA scheme take English, maths and ICT GCSEs makes little sense. Instead they should take the new functional English, maths and ICT courses designed to be taken by Diploma students.



In summary, Figure 19 shows our proposal for the structure that education should take between the ages of 14 and 18. This figure shows the new serial route in the Diploma programme and, for the sake of clarity, we have renamed YAs to Foundation Apprenticeships to bring them in line with the new Diploma from 14-16. It is important to note that we envisage students will still be able to move between routes if they wish.

4. Rationalise subjects so they sit in the most appropriate route

The scale of duplication across supposedly different pathways in our post-14 qualifications framework has become worse over time. For example, the new Diploma in Hair and Beauty Studies joins several existing qualifications such as a BTEC National in Beauty Therapy Sciences, a BTEC Short Course in Hairdressing, Beauty and Related Therapies, a BTEC Higher National in Beauty Therapy Sciences, an NVQ in Beauty Therapy, a BTEC National in Hairdressing and an NVQ in Hairdressing and Barbering – all of which involve a much larger amount of time in the workplace and therefore seem eminently more appropriate for this line of work. Another example would be ‘Construction and the Built Environment’, currently available as a GCSE, a Diploma and an NVQ. This level of duplication illustrates the muddled objectives of each route available to 14-year-olds. The situation will only get more confusing as the next three waves of Diplomas come into force. Almost every single one of the new Diplomas already has several vocational equivalents, which begs the question of why they are needed at all, while the final wave of Diplomas (Humanities, Languages and Science) has sparked controversy due to the obvious overlap with GCSEs and A-levels. The failure to specify which subjects are best served by either Academic, Applied or Vocational learning is wasting considerable sums of money and means that students and parents face even more unnecessary complications.

We recommend rationalising the available school-based qualifications to simplify the system. For example, Vocational GCSEs should be scrapped. The subjects involved are typically ‘applied’ rather than properly vocational and should be covered by the simplified Diploma route or the YA scheme. Another example would be the upcoming Diplomas in Humanities and Languages, which should also be dropped. If pupils wish to pursue academic subjects, GCSEs and A-Levels are already available. A Diploma in Applied Science makes more sense, given the enormous number of applications that science has in the real world. Given that one of the biggest problems STEM employers have is hiring technicians (rather than degree-level scientists) this could be an extremely valuable course if done properly.

More broadly, we suggest that all courses are reassessed to determine which route (Academic, Applied or Vocational) they are best served by. Many subjects will fit neatly into the academic route (e.g. maths, History) and many will clearly be better served as a fully vocational option (e.g. Construction, Motor Mechanics), while other subjects combine academic and vocational content so suit Applied courses (e.g. ICT, Engineering). Other subjects, though, are not as easily categorised as others (e.g. Drama/Theatre Studies, Health and Social care) so there is a need for a thorough review of the post-14 qualification framework to make the system as simple as possible.

One of the most enduring debates in education concerns 'standards' in primary and secondary schools. Literacy, numeracy and science form the backbone of the school curriculum with the intention of equipping pupils with these core skills by the time they leave school. The purpose of this report is to investigate the extent to which literacy, numeracy and science have improved since 1997 with a particular focus on SATs at age 7, 11 and 14.

Through a detailed analysis of national school performance data, a number of serious concerns are raised with regard to the current state of pupils' core skills. In addition, the curriculum from the ages of 14 to 16 - which includes GCSEs, Diplomas and Apprenticeships - is assessed in terms of its rigour, complexity and credibility. We also put forward our recommendations for the future direction of primary and secondary education, including a new model for SATs, more freedom for schools in how they teach core skills and creating a better set of academic and vocational options for pupils at age 14.



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