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# Reform of the National Curriculum in England

### **Reform of the National Curriculum in England**

The Government launched a review of the National Curriculum in January 2011 with the aim of ensuring that the aspirations we set for our children match those in the highest-performing education jurisdictions, and giving teachers greater freedom over how to teach. The proposals, on which we are consulting, represent the outcomes of that review. This consultation is being conducted under section 96 of the Education Act 2002.

|    | Primary Schools; Secondary Schools; Special Schools;          |
|----|---------------------------------------------------------------|
| То | Organisations representing school teachers; Subject           |
|    | Association; Parents; Young People; Higher Education; Further |
|    | Education; Academies; Employers/Business Sector; Local        |
|    | Authorities; Teachers                                         |

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If your enquiry is related to the policy content of the consultation you can contact the Department on 0370 000 2288

#### Enquiries To

e-mail: NationalCurriculum.CONSULTATION@education.gsi.gov.uk

### **Contact Details**

If you have a query relating to the consultation process you can telephone: 0370 000 2288 or use the <u>'Contact Us'</u> page.

### 1 Introduction

- **1.1** This consultation sets out the Government's plans to reform the National Curriculum in England. It follows a review of the National Curriculum which was launched in January 2011 with the following aims:
  - to ensure that the new National Curriculum embodies rigour and high standards and creates coherence in what is taught in schools
  - to ensure that all children are taught the essential knowledge in the key subject disciplines
  - beyond that core, to allow teachers greater freedom to use their professionalism and expertise to help all children realise their potential.
- **1.2** The National Curriculum continues to be statutory for all maintained schools. It also guides much of what is taught in many schools that have opted for academy status. More information about the National Curriculum and the review process can be found at sections 2 and 3.
- **1.3** Any debate about the National Curriculum should be seen in an international context. The best-performing jurisdictions deliberately set out to compare themselves against others; learning from other nations and asking constantly what is required to help all children do better. International surveys of pupils' performance show that a number of jurisdictions consistently out-perform England, even in subjects where we perform relatively well. This is despite the best efforts of our many excellent teachers.
- **1.4** For example, our performance in mathematics in TIMSS for pupils at the age of 10 has not improved since 2007, our mean score having remained almost unchanged at 542 (541 in 2007); or at the age of 14, where our mean score is 507 (513 in 2007).<sup>1</sup> TIMSS science results show a drop in performance. At age 10, our mean score dropped markedly from 542 in 2007 to 529 in 2011, and at age 14 from 542 to 533. Our results in PISA also show that we are behind high-performing jurisdictions in reading, with an above-average spread of attainment between pupils who do well and those who do not.<sup>2</sup>

- **1.5** Every performance measure reinforces the scale of the challenge that we face. In 2011, 18% of pupils in England left primary school without meeting the current expected standard in English, and 20% did not meet the expected standard in mathematics.<sup>3</sup> Employers and universities have also repeatedly highlighted school leavers' lack of proficiency in these subjects.<sup>4</sup>
- **1.6** Research has shown that there are clear deficiencies in the current National Curriculum inEngland.<sup>5</sup> All high-performing systems strongly emphasise the fundamentals of core academic subjects and allocate them substantial time yet in England we have been moving away from this approach. Our analysis of the curricula used in high-performing jurisdictions has shown, in particular, that our primary curriculum in mathematics and science focuses insufficiently on key elements of knowledge and is not as demanding as in other jurisdictions.
- **1.7** In mathematics specifically, England is among the countries with the lowest levels of participation for 16 to 18-year olds, with fewer than 20% of young people studying mathematics to 18.<sup>6</sup> In most high-performing jurisdictions, the study of mathematics in this age group is almost universal. The Government has already set out its ambition for the vast majority of young people to study mathematics through to 18.

### **1.8** Increasing rigour in key subjects within the National Curriculum

English, mathematics and science are the building blocks of education; improving our performance in these subjects will be essential if our country is to compete in the global economy. That is why they are central to the new National Curriculum.

- **1.9** Curriculum reform alone is not enough. No education system can be better than the quality of its teachers.<sup>7</sup> We need to improve the quality of teaching. We also need to press ahead with other reforms such as the pupil premium, the extension of free pre-school learning and the growth of academies and Free Schools.
- **1.10** The National Curriculum, however, embodies our ambitions. It sets high expectations and defines the essential knowledge, skills and understanding that all pupils should be taught.
- **1.11** In mathematics we are therefore introducing greater rigour. There will be a greater emphasis on arithmetic, and we will promote the efficient

written methods of long multiplication and division. There will be more demanding content in fractions, decimals and percentages. Our proposed programmes of study for science are also more ambitious. There is a stronger focus on the importance of scientific knowledge and language and a greater emphasis on the core scientific concepts underpinning pupils' understanding. The mathematical aspects of science have been strengthened and for the first time primary pupils will be taught about evolution and inheritance. The proposed English programmes of study will embody higher standards of literacy. Pupils will be expected to develop a stronger command of the written and spoken word. Through the strengthening of the teaching of phonics we will help more pupils to read fluently.

- **1.12** Proficiency in languages is vital to the future economic well-being of this country. In line with our international competitors, we have announced that we intend to make the study of a foreign language compulsory at Key Stage 2. This will enable schools to be more ambitious about teaching language in secondary school.
- **1.13** We also propose to replace the current ICT curriculum with a new computing curriculum with a much greater emphasis on computational thinking and practical programming skills. This will help to ensure that England retains a competitive edge in the vital and growing digital economy.

#### 1.14 Greater flexibility to meet the needs of all pupils

It is essential to distinguish between the statutory National Curriculum and the whole school curriculum. All schools must provide a curriculum that is broadly based, balanced and meets the needs of all pupils.<sup>8</sup>

- 1.15 Maintained schools must follow the statutory National Curriculum and teach the subjects specified at the appropriate key stages. Academies and Free Schools have the freedom to depart from the National Curriculum. All schools must teach religious education at all key stages, and secondary schools must provide sex education.
- **1.16** In providing greater flexibility to professionals, we have considered changes to both curriculum breadth and depth. International evidence shows that high-performing jurisdictions tend to promote a wide range of subjects in compulsory education.<sup>9</sup> We will therefore retain the current subject composition of the National Curriculum, with the addition of foreign languages at Key Stage 2 and, subject to the

outcome of this consultation, a change from ICT to computing. We do not believe that further compulsion at Key Stage 4 is necessary or appropriate: we are using other measures such as the English Baccalaureate to encourage more schools to offer a broad academic education to all pupils, particularly the most disadvantaged, to age 16 in line with our international competitors. We are also consulting on new floor standard measures for secondary schools which will encourage schools to offer a high-quality, broad curriculum at Key Stage 4.<sup>10</sup>

- 1.17 The new National Curriculum has detailed programmes of study for primary English, mathematics and science. These programmes of study specify the core knowledge which provides the foundations for all further learning, and are therefore intended to be a detailed guide to teachers to support them in bringing about a step-change in performance in these vital subjects. In other subjects and key stages we are aiming to give teachers more space and flexibility to design their lessons by focusing only on the essential knowledge to be taught in each subject. <sup>11</sup> This move to greater school-level autonomy is also reflected in Ofsted's inspection framework, which focuses on educational outcomes rather than prescribing a preferred style of teaching. <sup>12</sup>
- 2 Further information about the National Curriculum

#### 2.1 The National Curriculum

The National Curriculum was established under the 1988 Education Reform Act and consists of core and foundation subjects.<sup>13</sup> Legislation requires the Secretary of State for Education to publish programmes of study and attainment targets for all core and foundation subjects. The National Curriculum applies to pupils of compulsory school age in maintained schools, including maintained special schools, in England.

### 2.2 Core and foundation subjects

The National Curriculum is divided into four key stages:

- Key Stage 1 ages 5 7
- Key Stage 2 ages 7 11
- Key Stage 3 ages 11 14
- Key Stage 4 ages 14 16

We do not plan to make any changes to the key stage structure.

- **2.3** The core subjects are English, mathematics and science, which are compulsory at all four key stages. The current foundation subjects are:
  - art and design (Key Stages 1 3)
  - citizenship (Key Stages 3 and 4)
  - design and technology (Key Stages 1 3)
  - geography (Key Stages 1 3)
  - history (Key Stages 1 3)
  - information and communication technology (ICT) (Key Stages 1 4)
  - music (Key Stages 1 3)
  - modern foreign languages (MFL) (Key Stage 3 only)
  - physical education (PE) (Key Stages 1 4).
- 2.4 Foreign languages will be included in the new National Curriculum at Key Stage 2 as a foundation subject from September 2014, and we are also proposing to replace ICT with a new computing curriculum (see section 8). We do not propose to make any other changes to the list of National Curriculum subjects. Pupils at Key Stage 4 will continue to have access to subjects available under the existing four entitlement areas of arts, design and technology, humanities and modern foreign languages.
- 3 The review process
- **3.1** On 20 January 2011 the Secretary of State for Education announced a review of the National Curriculum in England. The proposals on which we are now consulting are the culmination of extensive analysis of curricula used in the world's most successful education jurisdictions, particularly in the core subjects, and consideration of nearly 6,000 submissions to our call for evidence. We have also engaged with high-performing teachers and headteachers from across the country to learn more about the most effective practice in England, and have worked with subject experts and key organisations across all National Curriculum subjects to inform our thinking.
- **3.2** In December 2011, the review's Expert Panel, chaired by Tim Oates, <sup>14</sup> published its report. This set out a series of recommendations for the new National Curriculum framework; it formed part of a wider suite of documents setting out the results of the research conducted by the

review and designed to generate discussion. The published documents included:

- a summary of evidence gathered about curricula for English, mathematics and science in high-performing jurisdictions
- a research report on subject breadth in the curricula used in other education jurisdictions
- a summary report of the responses to the review's call for evidence.

These documents can be found here.

- **3.3** In June 2012, we published draft programmes of study for primary English, mathematics and science for wider discussion. Since then, we have discussed the drafts with key subject organisations, teachers and subject experts, and have reviewed the content in the light of the helpful feedback we received.
- **3.4** The review of the National Curriculum has been managed by the Department for Education reporting to the Secretary of State for Education, who has statutory responsibility for the National Curriculum. The work of the review has been guided by an Advisory Committee chaired by the Director-General for Education Standards in the Department. The membership of the Advisory Committee can be found <u>here</u>.
- 4 Scope and coverage of the consultation
- **4.1** This consultation covers the Government's proposals relating to the following elements of the framework for the National Curriculum in England:
  - proposed aims for the new National Curriculum
  - changes to the programmes of study and attainment targets for all subjects and key stages (except English, mathematics and science at Key Stage 4)
  - a proposal to replace the ICT programmes of study with new computing programmes of study
  - the equalities impact of the reforms
  - issues relating to the implementation of the new National Curriculum
  - the disapplication of aspects of the current National Curriculum

for a limited period from September 2013.

- **4.2** We are seeking the views of schools, teachers (and organisations representing teachers), parents, colleges and universities, subject associations, employers, children and young people, local authorities, governors' associations and others with an interest in the National Curriculum.
- **4.3** We have published the Key Stage 4 programmes of study for English, mathematics and science alongside this consultation for illustrative purposes <u>here</u>. Respondents are free to comment on these drafts. We are not, however, consulting formally on these at this time. This is because we believe that it is important to consider the content of these programmes of study alongside the new requirements for the subject content of the reformed GCSE qualifications in these subjects.<sup>15</sup> This will ensure that the curriculum and qualifications are fully coherent. We will, therefore, provide further details of the reformed GCSEs later this year and launch the statutory consultation on Key Stage 4 programmes of study for English, mathematics and science once that information is in the public domain.
- **4.4** The programmes of study for English, mathematics and science at Key Stage 4 will be introduced from September 2015 alongside first teaching of the reformed GCSEs in these subjects.
- 5 Using the consultation documents
- **5.1** Respondents should refer to '*The National Curriculum in England: Framework document for consultation*' when responding to this consultation.
- 6 Aims of the National Curriculum
- **6.1** The Expert Panel recommended that curriculum aims be developed to ensure coherence across the school system.<sup>16</sup> Analysis of the frameworks of high-performing jurisdictions suggests that aims can be important in driving national policy and in influencing frontline practice, although the extent to which this is true is likely to depend on the national context.

- **6.2** For England, our overarching educational aspirations are set out in legislation <sup>17</sup> which requires schools to offer a balanced and broadly based curriculum that:
  - promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society, and
  - prepares pupils at the school for the opportunities, responsibilities and experiences of later life.
- **6.3** The Government confirmed in its response to the Expert Panel's report that it would also define the overall aims of the National Curriculum and set expectations for individual subjects, and that it would consult on these. The drafts on which we are consulting therefore include such aims. In the context of our general policy of freeing schools to use their professional judgement, however, it is arguable that the detailed subject-level aims set out in each programme of study are unnecessary, and that the purpose of study for each subject and the content should be sufficient to guide teachers in designing their curricula. We would welcome views on this.

### Question 1: Do you have any comments on the proposed aims for the National Curriculum as a whole as set out in the framework document?

Question 2: Do you agree that instead of detailed subject-level aims we should free teachers to shape their own curriculum aims based on the content in the programmes of study?

7 Programmes of study and attainment targets

### 7.1 Revising the programmes of study

As described in the introduction, the revised draft programmes of study provide a clear sense of the high expectations that are required in the core subjects of English, mathematics and science at primary level while providing greater flexibility in the other National Curriculum subjects at primary and in all subjects at secondary level.

### Question 3: Do you have any comments on the content set out in the draft programmes of study?

# Question 4: Does the content set out in the draft programmes of study represent a sufficiently ambitious level of challenge for pupils at each key stage?

### 7.2 Changing the form of attainment targets

Legally, the National Curriculum for each subject must comprise both programmes of study and attainment targets. While programmes of study set out the curriculum content that pupils should be taught, attainment targets define the expected standard that pupils should achieve by the end of each key stage. Under the current National Curriculum, the standard is set out through a system of levels and level descriptions for each subject. The national expectation is defined as a particular level for the end of Key Stages 1, 2 and 3. At Key Stage 4, GCSE qualifications at grade C currently define the expected standard.

- **7.3** The Government has already announced its intention to simplify the National Curriculum by reforming how we report progress. We believe that the focus of teaching should be on subject content as set out in the programmes of study, rather than on a series of abstract level descriptions. Parents deserve a clear assessment of what their children have learned rather than a 'level description' which does not convey clear information.
- 7.4 A single statement of attainment that sets out that pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study will encourage all pupils to aspire to reach demanding standards. Parents will be given clear information on what their children should know at each stage in their education and teachers will be able to report on how every pupil is progressing in acquiring this knowledge.
- **7.5** We are currently seeking views on how to improve the accountability measures for secondary schools in England. The consultation can be accessed <u>here</u>.
- **7.6** Approaches to the assessment of pupils' progress and recognising the achievements of all pupils at primary school will be explored more fully within the primary assessment and accountability consultation which will be issued shortly.

### *Question 5: Do you have any comments on the proposed wording of the attainment targets?*

### 7.7 Progression and transition through the National Curriculum

We have given careful consideration to progression between key stages, within individual subjects, and across subjects to ensure that the National Curriculum provides a coherent sense of what pupils should learn during their time at school.

**7.8** We have also reviewed the key transition points for children progressing from the early learning goals in the new Early Years Foundation Stage to Key Stage 1 and for pupils who are moving from Key Stage 4 into post-16 study. In particular, we have made sure that the expectations in Year 1 for English and mathematics build on the expectations set out for language and communication, literacy and mathematics in the early learning goals.

### Question 6: Do you agree that the draft programmes of study provide for effective progression between the key stages?

- 8 Replacing the ICT curriculum with a new computing curriculum
- 8.1 We propose to replace the existing ICT curriculum with a new computing curriculum. The new subject title will reflect the content included in the revised programmes of study for the subject. These are more ambitious and rigorous than the existing (and now disapplied) programmes of study for ICT, and place much greater emphasis on teaching the principles of computational thinking and practical programming skills.
- 8.2 The new curriculum will not only prepare pupils to apply existing digital technologies confidently and effectively in further study and employment, but will also provide them with the fundamental knowledge and skills needed to create new digital technology products.

Changing the subject to computing is also in keeping with the views of learned bodies such as the Royal Society.

Question 7: Do you agree that we should change the subject information and communication technology to computing, to reflect the content of the new programmes of study for this subject?

- 9 Impact of the new National Curriculum equalities
- **9.1** The Equality Act 2010 requires the Government to have due regard to the need to eliminate discrimination, advance equality of opportunity and foster good relations. The content of the curriculum is not specifically covered by the Act but we have been determined, throughout this process, to ensure that our polices make opportunities more equal for every child.
- **9.2** One of the key objectives of the National Curriculum review has been to ensure that all pupils, irrespective of background or circumstance, should have the opportunity to acquire the essential knowledge and skills that they need to succeed in life. We want to 'democratise knowledge' by ensuring that as many children as possible can lay claim to a rich intellectual inheritance.
- **9.3** This means allowing the National Curriculum to be taught in ways that enable all pupils to have an equal opportunity to succeed. The new programmes of study give teachers greater scope to tailor their teaching in ways that help to meet the particular needs of all pupils.
- **9.4** We have retained an inclusion statement in the draft National Curriculum framework. By enabling schools to make reasonable adjustments as appropriate to support pupils' needs, the inclusion statement reinforces the role that schools play in helping all pupils to access the National Curriculum and to achieve the highest possible standards.

*Question 8: Does the new National Curriculum embody an expectation of higher standards for all children?* 

*Question 9: What impact - either positive or negative - will our proposals have on the 'protected characteristic' groups?*<sup>18</sup>

- 10 Views from parents
- **10.1** Parents want to support their children's education to help them get the best possible start in life. When parents are engaged in their child's education, those children achieve better outcomes.<sup>19</sup> Parental involvement from an early age has a significant impact on pupils' educational achievement. If we can make it easier for parents to support their children then we can help all pupils achieve better exam results and have more control over their own future.

**10.2** To that end, we want the new National Curriculum to help parents understand what their children should know and be able to do at different stages of their education. We believe that this will help parents to support their children to a greater extent, and to have more meaningful discussions with teachers about how their children are doing at school.

## Question 10: To what extent will the new National Curriculum make clear to parents what their children should be learning at each stage of their education?

- 11 Implementation of the new National Curriculum
- **11.1** We know that the successful implementation of the new National Curriculum will depend on how well it is communicated to schools, how well schools plan for it and how well it is taught in the classroom.
- **11.2** Reforms to the curriculum, to assessment and to qualifications will make new demands on the teaching workforce in terms of subject expertise, pedagogy, and curriculum design and leadership.
- **11.3** Research shows that headteachers' approach to staff development is one of the single most important factors in determining the quality and effectiveness of school improvement.<sup>20</sup> Schools are best placed to decide which resources meet their needs and to secure these accordingly. It is right, therefore, that we move away from large-scale, centralised training programmes, which limit schools' autonomy, and towards a market-based approach in which schools can work collaboratively to provide professional development tailored to individual needs.

Question 11: What key factors will affect schools' ability to implement the new National Curriculum successfully from September 2014?

Question 12: Who is best placed to support schools and/or develop resources that schools will need to teach the new National Curriculum? 12 Phasing of implementation and disapplication of aspects of the National Curriculum

### 12.1 Phasing

There are mixed views about whether to implement the new National Curriculum in a phased way over a number of years or all at one time. Given the importance of as many pupils as possible benefiting from the new curriculum, we have concluded that our general approach should be to implement the new curriculum for all subjects and year groups from September 2014, with exceptions only where it is necessary to ensure coherence with the timing of the reformed GCSEs at Key Stage 4. In primary schools, we will introduce the new programmes of study in all subjects for all year groups in September 2014. At secondary, pupils will be studying the reformed GCSEs in English, mathematics, science, history and geography from September 2015 for first examinations in 2017. Changes to remaining subjects will follow as soon as possible after that.

### 12.2 Disapplication of existing programmes of study, attainment targets and statutory assessment arrangements

To support schools in their transition to the new curriculum, and to help pupils to succeed in the new National Curriculum tests and qualifications, we are proposing to disapply some aspects of the current National Curriculum from September 2013. This will give schools greater freedom to adapt their own curricula before first teaching of the new National Curriculum from September 2014. Schools will still be required to teach the *subjects* of the National Curriculum but they will not have to teach the current prescribed *content* of the current programmes of study.

12.3 For primary schools, this would mean that from September 2013 we would disapply the programmes of study, attainment targets and statutory assessment arrangements for English, mathematics and science for pupils in Year 3 and Year 4 to give teachers greater freedom to prepare pupils for National Curriculum tests in these subjects when they reach Year 6. We also propose to disapply the current programmes of study and attainment targets at Key Stages 1 and 2 from September 2013 for all foundation subjects. For the purposes of Key Stage 1 assessment arrangements in English, mathematics and science, we need to retain the existing programmes of study,

attainment targets and assessment arrangements in Years 1, 2, 5 and 6 so we are not proposing to disapply these.

12.4 At secondary level, it is vital that we maximise schools' capacity to support and prepare pupils to succeed in more rigorous GCSEs. We therefore propose to disapply the current programmes of study for all subjects at Key Stage 3 (English, mathematics, science, art and design, citizenship, design and technology, geography, history, modern foreign languages, music and PE) and Key Stage 4 (English, mathematics, science, citizenship and PE) from September 2013. Disapplication would continue until the new programmes of study came into force for each subject for each year group.

The ICT programmes of study have already been disapplied from September 2012.

**12.5** If we proceed with this proposal, we will also be required to amend relevant references to statutory assessment arrangements in the Pupil Information Regulations.

Question 13: Do you agree that we should amend the legislation to disapply the National Curriculum programmes of study, attainment targets and statutory assessment arrangements, as set out in section 12 of the consultation document?

- 13 Next Steps
- **13.1** This consultation will close on 16 April 2013. The results of the consultation and the Department's response will be published on the e-consultation website in the summer. We will announce our decisions and consult on the draft statutory instruments needed to bring the changes into effect in the summer, and publish the final National Curriculum early in the autumn term to give schools a year to prepare for first teaching from September 2014.
- 14 Legislative context
- **14.1** The Secretary of State proposes to make provision under part 6 of the Education Act 2002 having the effect that (1) the current programmes of study for all National Curriculum subjects at all four key stages, and the associated attainment targets and assessment arrangements, will be revoked and replaced with new ones from September 2014; (2) the term 'information and communication technology' will be replaced with

'computing'; and (3) the programmes of study and associated attainment targets and assessment arrangements for the current National Curriculum subjects will be disapplied from September 2013 as proposed. Section 96 of the Education Act 2002 requires the Secretary of State to consult those with an interest in the proposals.

### 15 How to respond

**15.1** Consultation responses can be completed online at: <u>www.education.gov.uk/consultations</u>,

by emailing NationalCurriculum.CONSULTATION@education.gsi.gov.uk,

or by downloading a response form which should be completed and sent to: Consultation Unit, Area 1c, Castle View House, East Lane, Runcorn, Cheshire, WA7 2GJ.

- 16 Additional copies
- **16.1** Additional copies are available electronically and can be downloaded from the Department's e-consultation website at: www.education.gov.uk/consultations

3 - DfE (2012), National Curriculum Key Stage 2 test results in England:

http://www.education.gov.uk/researchandstatistics/datasets/a00213778/national-curriculum-assessments-ks2england

4 - CBI (2012), Learning to grow: what employers need from education and skills (Education and Skills survey 2012): http://www.cbi.org.uk/media-centre/press-releases/2012/06/further-progress-on-school-and-college-leaverattainment-requires-radical-new-vision-cbi-pearson/

5 - Tim Oates (2010), Could do better: Using international comparisons to refine the National Curriculum in England: <u>http://www.cambridgeassessment.org.uk/ca/Viewpoints/Viewpoint?id5502</u>

7 - DfE (2010), The Importance of Teaching: The Schools White Paper 2010:

http://www.education.gov.uk/schools/toolsandinitiatives/schoolswhitepaper/b0068570/the-importance-of-teaching 8 - See Section 78 of the 2002 Education Act: <u>http://www.legislation.gov.uk/ukpga/2002/32/section/78</u> which applies to all maintained schools. Academies are also required to offer a broad and balanced curriculum in accordance with

10 - The secondary school accountability consultation can be accessed at: www.education.gov.uk/aboutdfe/departmentalinformation/consultations

<sup>1 -</sup> Ina V.S. Mullis, Michael O. Martin, Pierre Foy and Alka Arora (2011), TIMSS (Trends in International Mathematics and Science Study) 2011, International results in mathematics.

<sup>2 -</sup> PISA (Programme for International Student Assessment) 2009 Results: What students know and can do Student performance in reading, mathematics and science (Volume I). In PISA 2009, England had a mean score of 495 in reading, which was similar to the OECD average of 493; in mathematics, the score was 493, which was not significantly different from the OECD average of 496; and in science, it was 515, which was significantly above the OECD average of 501.

<sup>6 -</sup> Nuffield Foundation (2010), Is the UK an outlier? An international comparison of upper secondary mathematics education

Section 1 of the 2010 Academies Act::<u>www.legislation.gov.uk/ukpga/2010/32/section/1</u> 9 - DfE (2011), Review of the National Curriculum in England: Report on subject breadth in international jurisdictions: <u>https://www.education.gov.uk/nationalcurriculumreview</u>

11 - All schools are required to publish information in relation to each academic year, setting out the content of the schools own curriculum for each subject: <u>http://www.legislation.gov.uk/uksi/2012/1124/made</u>

12 - Speech by Her Majestys Chief Inspector of Schools, London Festival of Education, 17 November 2012

13 - The curriculum requirements for maintained schools are set out in Part 6 of the Education Act 2002. Sections 84 and 85 provide for the National Curriculum subjects at all key stages:

http://www.legislation.gov.uk/ukpga/2002/32/contents

14 - Director of Assessment Research and Development, Cambridge Assessment

15 - Further information about GCSE reform is available at:

http://www.education.gov.uk/schools/teachingandlearning/qualifications/gcses

16 - DfE (2011), The Framework for the National Curriculum. A Report by the Expert Panel for the National Curriculum review: <a href="https://www.education.gov.uk/nationalcurriculumreview">https://www.education.gov.uk/nationalcurriculumreview</a>

17 - Section 78 of the 2002 Education Act: http://www.legislation.gov.uk/ukpga/2002/32/section/78

18 - The protected characteristics cover disability, ethnicity, gender, sexual identity, gender identity, religion or belief and, for workforce issues, age.

19 - DCSF (2008), The impact of parental involvement on childrens education:

https://www.education.gov.uk/publications/standard/Childrenandfamilies/Page10/DCSF-00924-2008

20 - DfE (2010), The Importance of Teaching: The Schools White Paper 2010:

http://www.education.gov.uk/schools/toolsandinitiatives/schoolswhitepaper/b0068570/the-importance-of-teaching