Curriculum reform consultation

30 April – 24 July 2009

Primary curriculum review questionnaire

Thank you for your participation.

When you have completed this survey, please email it to **info@qca.org.uk**, or post to:

Simon Watmough, Ipsos MORI House, 79-81 Borough Road, London, SE1 1FY.

QCA is managing this consultation, on behalf of the Department for Children, Schools and Families

Thank you for your interest in participating in the curriculum reform consultation.

We will now ask you for some contact information and personal data (ethnicity, disability, belief etc) to meet our legal requirement to monitor equalities.

We may use the information collected here to contact you:
- with further questions about the consultation
- if we need to clarify your responses
- to tell you about the findings of the consultation
- about similar consultation exercises in the future, and
- to give you information about other QCA activities such as conferences.

We will also use this information to check that the consultation is representative.

This information will be kept strictly confidential. The analysis of responses will be carried out by an external organisation. This organisation must comply with the Data Protection Act in its handling of personal data and will only process personal data on instructions from QCA.

QCA is managing this consultation, on behalf of the Department for Children, Schools and Families

Your name and contact details:

First name: David   Last name: Montagu
Email address: david.montagu@royalsociety.org
Postal address: The Royal Society, 6–9 Carlton House Terrace, London
Postcode: SW1Y 5AG
Phone no: Daytime 020 7451 2580
Phone no: Mobile

Who you represent:

In which capacity are you responding to this consultation? Please tick one box only:

Learner		Governor	
Parent		Local authority representative	
Teacher		Employer	
Headteacher		Member of the wider education community	
Member of the wider school workforce			
Other Learned Society			

If you are a teacher or headteacher, governor or member of the wider school workforce, what is the name and postcode of your school?

School	Postcode

If you are a local authority representative, what is the name of your local authority?

Local Authority	

Are you responding to this consultation as an individual or as an organisation? Please tick one box only:

As an individual		As an organisation	✓	If an organisation, approximately how many people are in the organisation?	135

If you are responding on behalf of an organisation, what is the name of your organisation?

The Royal Society

Equality monitoring:

What is your gender? Please tick one box only:

Female		Male		Prefer not to say	

What is your ethnic origin? Please tick one box only:

White		Asian/Asian British	
White British	✓	Indian	
White Irish		Pakistani	
Any other White background, write in		Bangladeshi	
		Chinese	
		Any other Asian background, write in	
Mixed/multiple ethnic groups			
White and Black Caribbean			
White and Black African		Black/Black British	
White and Asian		African	
Any other Mixed background, write in		Caribbean	
		Any other Black background, write in	
Prefer not to say			
		Other ethnic group	
		Any other ethnic group, write in	

Do you have a disability or longstanding illness? Please tick one box only:

Yes		No		Prefer not to say	✓

What is your religion? Please tick one box only:

No religion	
Christian (including Church of England, Catholic, Protestant and all other Christian denominations)	
Buddhist	
Hindu	
Jewish	
Muslim	
Sikh	

Any other religion		Write in	

Prefer not to say	✓

What is your sexual orientation? Please tick one box only:

Bisexual		Lesbian/Gay woman	
Homosexual/Gay man		Heterosexual/straight	

Prefer not to say	✓

Proposals to change the primary curriculum

This consultation offers all those involved in education, including teachers, governors, parents, employers and young people the opportunity to comment on the proposed primary curriculum. The feedback you provide will be used by the government to inform final decisions about the primary curriculum.

Before starting the questionnaire you may find it useful to read the report of the independent review of the primary curriculum by Sir Jim Rose, the Secretary of State's response and the proposed primary curriculum. These documents are available at **www.qca.org.uk/curriculumconsultation**, or can be obtained by calling the QCA Enquiry line on 020 7509 5556 or by emailing info@qca.org.uk.

This survey is approximately 30 questions long, across five sections, but could be considerably longer depending on the options you select. It could take more than 30 minutes to complete, depending on how detailed your responses are.

When considering your response to each question please try and think about all learners including those with special educational needs, disabled learners, the gifted and talented, children from minority ethnic groups and those with English as an additional language.

If you have any queries about this consultation, or the questionnaire, please email info@qca.org.uk or call QCA's Enquiry line on 020 7509 5556.

Your personal information, and the data collected in this survey will be treated in the strictest confidence*.*

Thank you for your participation.

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department for
children, schools and families

Section 1: How the curriculum is organised

The proposed curriculum is organised into three parts:
1. Curriculum aims
2. Six areas of learning
3. Essentials for learning and life

The following questions ask you about the contribution of each of these parts to the proposed curriculum:

The proposed curriculum aims provide an appropriate foundation for primary education

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	✓
Not sure	

The proposed areas of learning help teachers to plan meaningful learning experiences

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

The proposed areas of learning will help children make useful links between related subjects

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

The proposals to integrate information and communication technology (ICT) through the curriculum will help children use technology to enhance their learning

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

The proposed essentials for learning and life provide schools with a helpful framework for the skills that all children should develop

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	✓
Not sure	

Overall, the proposed curriculum is less prescriptive than the existing curriculum

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	✓
Not sure	

Overall, the proposed curriculum will give schools more flexibility to adapt the curriculum to the needs of their children

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	✓
Not sure	

If you would like, please give reasons for your responses given above

(please limit your answer to around 200 words)

Curriculum aims
The aims of the curriculum need to be more clearly defined, and they should be more concerned with developing people with 'inquiring' minds (which good teaching in science should inspire) who are scientifically literate as well as literate. The diagrammatic representation of the structure of the curriculum (p. 47) suggests a jigsaw arrangement in which cross-curricular links occur between those 'areas of learning' that are immediately adjoining. As is the nature of puzzles, each piece has its own correct place, so trying to fit an 'area of learning' into a non-adjoining 'area of learning' will not be possible in the current scheme; this contradicts the desired concept of a dynamic truly cross-curricular framework.

Curriculum structure
Identification of a 'core' set of 'essential skills' as distinct from 'areas of learning' may create a divisive two-tier system that leads to marginalisation of certain subjects, particularly where teaching specialism in subjects such as science is lacking in schools. Recent data obtained by the Royal Society from the TDA show that the percentages of graduates with STEM first degrees accepted onto (which is quite separate from completing) PGCE primary courses fell from 4% to just 2% of all graduates accepted onto these courses between 2004 and 2006 (Royal Society 'state of the nation' report on *The UK's science and mathematics teaching workforce*, December 2007, table 4.3, p. 34). Indeed the Society believes that for the proposed 'Science and technological understanding' strand to really succeed in stimulating pupils' interest in science, every primary school will need access to at least one teacher with specialist knowledge and understanding of science, building on the development of science subject leaders.

Aside from recruitment, long-term investment needs to be put into retaining sufficient numbers of science specialist teachers, and to ensuring that their numbers are adequately monitored over time. In particular, the Science Learning Centres require prolonged funding to enable them to secure their place as a valuable component of the educational infrastructure and so provide the professional development the Government desires for newly qualified and supply teachers and for teachers holding a valid 'licence to teach' (*Your child, your schools, our future* White Paper, June 2009, p. 90).

While due attention is likely to be paid to those 'areas of learning' that directly relate to the 'essentials' (eg the obvious connect between literacy and numeracy and their complementary areas of learning, 'Mathematical understanding' and 'Understanding English, communication and languages'), the other proposed 'areas of learning', including that of 'Scientific and technological understanding', may be accorded less teaching time. Evidence collected by the Cambridge Primary Review indicates that science has already suffered diminution owing to the focus on literacy and numeracy (*Towards a new curriculum, vol. II*, pp. 3, 21, 51). Although the Society welcomes the Secretary of State's decision, made on the advice of the Expert Group on Assessment, to abolish high-stakes science testing at the end of Key Stage 2, we are concerned that unless the equivalent tests in mathematics are also abandoned, teachers will feel as pressured as ever to continue 'teaching to the test' in mathematics and be less inclined to adopt the freer, more innovative and enquiry-based approach the proposed reforms are rightly advocating. Our concerns for science and mathematics are heightened given the dearth of science and mathematics specialist teachers, the associated lack of confidence in teaching these subjects, and the White Paper's expectation that, with the abandonment of the National Strategies, schools will be expected to take more individual responsibility for their own success and performance (White Paper, p. 56).

The proposed inclusion of technology and design and ICT within the curriculum will require specific teacher training. The Society is concerned that there will not be sufficient time to provide teachers with the preparation they will need ahead of the anticipated introduction of the new curriculum into schools in September 2011. ICT needs to be taught as a subject in its own right within ICT so that it may be applied across the curriculum by primary school teachers.

Curriculum demands
The Society cannot perceive within the proposals any slimming down of the current curricular demands. It appears, instead, that the proposed new structure repackages, rather than reduces, the current overly prescriptive and crowded demands of the curriculum, and this is contrary to achieving the dual requirement for increased flexibility and reducing teachers' stress levels. We are concerned that the proposed curriculum structure will not achieve the broad, balanced and flexible curriculum the Government is aiming for because, on a practical level, the teaching infrastructure required for this simply does not exist.

Section 2: Essentials for learning and life

The essentials for learning and life, as defined in the proposed curriculum, are the key skills, attitudes and attributes that children need to develop to support their learning, personal relationships and individual development.

The essentials for learning and life are in two parts:

- literacy and numeracy and ICT capability
- learning and thinking skills, personal and emotional skills and social skills

The following questions ask about the contribution of each of these parts to the proposed curriculum:

Literacy and numeracy should be part of the essentials for learning and life

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Placing literacy and numeracy in the essentials for learning and life offers teachers a helpful way of incorporating these skills across the entire curriculum

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Literacy and numeracy as set out in the proposed primary curriculum provides the necessary knowledge and skills that children need to develop in this area

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

ICT should be part of the essentials for learning and life

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Placing ICT in the essentials for learning and life offers teachers a helpful way of incorporating ICT across the entire curriculum

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

ICT as set out in the proposed primary curriculum provides the necessary knowledge and skills that children need to develop

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

ICT is clearly expressed across the curriculum

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Learning and thinking skills, personal and emotional skills and social skills should be part of the essentials for learning and life

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Placing the learning and thinking skills, personal and emotional skills and social skills in the essentials for learning and life offers teachers a helpful way of incorporating these skills across the entire curriculum

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Learning and thinking skills, personal and emotional skills and social skills as set out in the proposed primary curriculum provide the necessary knowledge and skills that children need to develop

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

If you would like, please give reasons for your responses given above

(please limit your answer to around 200 words)

The style of questioning assumes assent for the new curriculum structure is a given. We do not accept this, but we do acknowledge the importance of a core mathematical component existing in the curriculum. We also share the Advisory Committee on Mathematics Education's concerns: (i) that naming a component of the curriculum does not magically change pedagogy and practice; and (ii) that the term 'numeracy' needs to be clearly distinguished from 'mathematics' across Government, the education community and the teaching workforce.

While we agree that ICT needs to embedded across the curriculum, greater exemplification of how this might be achieved within 'Scientific and technological understanding' is needed in non-statutory material and better elaborated within the *Breadth of learning*.

Nonetheless, it is vital that teaching and learning outside 'Scientific and technological understanding' enable young people to apply ICT skills directly to scientific investigations. Valuable subject-specific learning time should not be spent on understanding how to use the software.

Section 3: Areas of learning

*(*You may choose one, more than one or none at all – if none, move to section 4.)

Understanding the arts	
Historical, geographical and social understanding	
Mathematical understanding	✓
Understanding English, communication and languages	
Scientific and technological understanding	✓
Understanding physical development, health and wellbeing	
Religious education (non-statutory)	
None	

One of the key proposals for the primary curriculum is that the curriculum should move from a subject-based design to areas of learning.

Please read the area of learning on which you wish to comment and answer the questions below. Each question refers to a different section of the area of learning.

Why is this area of learning important captures the significance of this area for children's education

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding		✓			
Understanding English, communication and languages					
Scientific and technological understanding				✓	
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

Essential knowledge captures the big ideas of what it is children need to learn at primary school

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding		✓			
Understanding English, communication and languages					
Scientific and technological understanding				✓	
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

Key skills are the important skills that children need to develop in this area of learning in order to progress at primary school

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding		✓			
Understanding English, communication and languages					
Scientific and technological understanding				✓	
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

Breadth of learning covers a sufficient range of content and experiences

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding	✓				
Understanding English, communication and languages					
Scientific and technological understanding	✓				
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

The three curriculum stages (early, middle and later) help teachers plan for progression

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding			✓		
Understanding English, communication and languages					
Scientific and technological understanding				✓	
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

Cross-curricular studies makes useful links to other areas of learning and the essentials for learning and life framework

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding			✓		
Understanding English, communication and languages					
Scientific and technological understanding				✓	
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

The explanatory text is helpful in improving understanding of this area of learning

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding			✓		
Understanding English, communication and languages					
Scientific and technological understanding				✓	
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

There is sufficient reference to ICT in this area of learning

	Strongly agree	Tend to agree	Tend to disagree	Strongly disagree	Not sure
Understanding the arts					
Historical, geographical and social understanding					
Mathematical understanding				✓	
Understanding English, communication and languages					
Scientific and technological understanding				✓	
Understanding physical development, health and wellbeing					
Religious education (non-statutory)					

If you would like, please give reasons for your responses given above

(please limit your answer to around 200 words)

'Scientific and technological understanding'
Overall, the Society feels that the teaching of science as a conceptual framework for understanding the world around us will be diminished by its subjugation to design and technology. Although design and technology are crucial to progressing scientific knowledge and understanding, they are but one part of it.

Name of 'area of learning'. We are concerned that the central importance of ICT in schools and within the curriculum, as evidenced by references to technology in the Review itself, may lead to a very narrow interpretation of the term 'technological'. We recommend that this 'area of learning' be renamed.

Why is this area of learning important? The text of the section *Why is this area of learning important?* is unimaginative and uninspired, providing little more than a mechanistic description of what teachers are expected to cover. It simply fails to capture the importance, excitement and the true breadth of this area of learning. Consequently, we recommend that this text should be redrafted, and that consideration be given to the improved wording advanced by the Association for Science Education (ASE).

Essential knowledge. The *Essential knowledge* should be redrafted so that it relates more closely to the wording for *Key skills* and is more closely aligned with the description of *Curriculum progression*. We recommend considering the revised wording put forward by the ASE.

Curriculum progression. While the structure of the three curriculum stages described under *Curriculum progression* is satisfactory, the content is not meaningful for teachers (eg we are concerned (i) that the current content of 'Science – the environment, Earth and solar system' does not specify what should be studied about the solar system; and (ii) that aspects of science, technology and design are not sufficiently delineated, or linked, where they need to be). Critically, the content in this section lacks an essential sense of development of knowledge and understanding through time. We feel that it should be possible to describe the content without recourse to explanatory footnotes, and urge that the revised version the ASE has prepared should be given due consideration. This is applicable across all 'areas of learning'.

Cross-curricular studies. It would be more appropriate to include the section on *Cross-curricular* studies as a statement within the *Breadth of learning* rather than as a separate component. This would communicate the expectation that teaching should be cross-curricular while recognising that the content of cross-curricular *content* as opposed to *skills* should not be prescribed. This is applicable across all 'areas of learning'.

ICT. ICT usage needs to be better exemplified within this area of learning, and appropriate continuous professional development given to teachers so that they really understand and are able to integrate ICT in stimulating ways.

'Mathematical understanding'
Compared with 'Scientific and technological understanding', the proposed programme of learning for 'Mathematical understanding' is comparatively clear, coherent and comprehensive. However, its *Breadth of learning* should include consideration of historically significant mathematicians. This would ensure consistency between this programme of study and the inclusion of the history of science under its 'Scientific and technological understanding' analogue.

Section 4: Languages

Schools should be free to choose the languages they wish to teach at key stage 2

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Schools should, when possible, teach languages at key stage 2 that children will learn at key stage 3

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

Schools should teach one or two languages in depth

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

The language expectations in the area of learning entitled *Understanding English, communication and languages* are appropriate

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

If you would like, please give reasons for your responses given above

(please limit your answer to around 200 words)

Section 5: Learners' needs and transition

The proposed curriculum will enable schools to meet the needs of all learners

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	✓
Not sure	

The proposed curriculum will improve transition from the early years foundation stage

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	
Not sure	

The proposed curriculum will improve transition into the secondary phase

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	✓
Not sure	

The proposed curriculum will improve progression within the primary phase

Please tick one box only:

Strongly agree	
Tend to agree	
Tend to disagree	
Strongly disagree	✓
Not sure	

If you would like, please give reasons for your responses given above

(please limit your answer to around 200 words)

Although the Review's proposals preserve the concepts of Key Stages, it is not absolutely clear how these align with the new terminology of 'early', 'middle' and 'later' learning described within the various programmes of study. The terminology used needs to be consistent and transparent, otherwise there is likely to be confusion among teachers concerning the interpretation and practical implementation of the curriculum.

The structure and terminology used to describe the proposed new 'Scientific and technological understanding' strand does not map onto Key Stage 3 and, if left unaltered, will exacerbate the problems concerning teachers' subject knowledge and confidence referred to earlier. We recommend that the ASE's suggested revised schema for this strand be considered, which conveys a greater sense of progression throughout the primary curriculum and alignment with the 'How science works' aspect of Key Stage 3.

On a final point of terminology, we note that the Rose Review proposes statutory 'programmes of learning' (p. 147), which differ from the statutory 'programmes of study' at Key Stage 3 and Key Stage 4. It would be enormously helpful if care was taken to ensure consistency in the use, reference and application of terminology, wherever possible.

Thank you for your participation.

When you have completed this survey, please email it to **info@qca.org.uk**, or post to:

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