



Department  
for Education

**Consultation Response Form**

**Consultation closing date: 16 April 2013**  
**Your comments must reach us by that date.**

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

**Consultation Response Form**

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes, primarily the Freedom of Information Act 2000 and the Data Protection Act 1998.

If you want all, or any part, of your response to be treated as confidential, please explain why you consider it to be confidential.

If a request for disclosure of the information you have provided is received, your explanation about why you consider it to be confidential will be taken into account, but no assurance can be given that confidentiality can be maintained. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process your personal data (name and address and any other identifying material) in accordance with the Data Protection Act 1998, and in the majority of circumstances, this will mean that your personal data will not be disclosed to third parties.

<b>Please tick if you want us to keep your response confidential:</b>	<input type="checkbox"/>
Reason for confidentiality:	
Name: Moussa Haddad	
Organisation (if applicable): Royal Statistical Society	
Address: 12 Errol Street, London. EC1Y 8LX.	

If your enquiry is related to the DfE e-consultation website or the consultation process in general, you can contact the Public Communications Unit by e-mail: [consultation.unit@education.gsi.gov.uk](mailto:consultation.unit@education.gsi.gov.uk) or by telephone: 0370 000 2288 or via the Department's ['Contact Us'](#) page.

Please indicate one category that best describes you as a respondent

<input type="checkbox"/>	Primary School	<input type="checkbox"/>	Secondary School	<input type="checkbox"/>	Special School
<input type="checkbox"/>	Organisation representing school teachers	<input type="checkbox"/>	Subject Association	<input type="checkbox"/>	Parent
<input type="checkbox"/>	Young Person	<input type="checkbox"/>	Higher Education	<input type="checkbox"/>	Further Education
<input type="checkbox"/>	Academy	<input type="checkbox"/>	Employer/Business Sector	<input type="checkbox"/>	Local Authority
<input type="checkbox"/>	Teacher	<input checked="" type="checkbox"/>	Other		

Learned society

Are you answering this consultation in response to particular subjects? Please tick all those that apply.

<input type="checkbox"/>	English	<input type="checkbox"/>	mathematics	<input type="checkbox"/>	science
<input type="checkbox"/>	art & design	<input type="checkbox"/>	citizenship	<input type="checkbox"/>	computing
<input type="checkbox"/>	design & technology	<input type="checkbox"/>	geography	<input type="checkbox"/>	history
<input type="checkbox"/>	languages	<input type="checkbox"/>	music	<input type="checkbox"/>	physical education
<input type="checkbox"/>	Not applicable				

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

A major aspiration should be for more young people to engage fully with their education. At present, many become disaffected. It is common for those leaving school to fear, and so hate, mathematics, and to carry those attitudes with them through their adult lives.

It is critical for our long term economic success as a country, and for the fulfilment of our young people's talents, that the National Curriculum should address these issues.

The stated aims say nothing about motivation. This is an important gap.

**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?**

<input type="checkbox"/>	<input checked="" type="checkbox"/> Agree	<input checked="" type="checkbox"/> √	<input type="checkbox"/> Disagree	<input type="checkbox"/>	<input type="checkbox"/> Not sure
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This question is not clear. It does not distinguish between the situation of a primary school teacher, who teaches all subjects to the same class, and is devising a curriculum to cover them, and a specialist teacher in a secondary school teaching the same subject to several different classes. Greater flexibility is more appropriate in the former instance than in the latter.

In general, it would seem that aims should come first, and that the content should then fit the aims.

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

We have major concerns about the treatment of statistics in the programmes of study for mathematics.

Statistics is essential in providing the evidence that enables problems to be solved, and so the emphasis on problem solving as one of the three aims of the programme of study is in principle welcome. However, the sections entitled *Solve problems*, in the programmes of study for Key Stages 3 and 4, make no mention of statistics.

Recognised problem solving procedures, whatever the subject, involve cycles of activity such as the data handling cycle. More broadly, statistics, properly understood, is fundamentally about information (often numerical) in context – data – and about applying quantitative skills to real problems that relate to them. It is not about a collection of techniques in isolation, but about creatively applying those techniques in the context of a problem solving cycle. As such, it promotes a way of understanding the world that is transferable across a range of subjects and situations.

However, there is no mention of any such cycles in the description of problem solving. (The nearest approach to one is in the final statement in the Statistics section of the Key Stage 3 programme of study, but, if this is intended to refer to a cycle of activity such as the data handling cycle, it requires considerable redrafting.) Consequently, one of the three aims of the mathematics curriculum is unlikely to be fulfilled, and as a result students will not understand the true nature of statistics.

More broadly, there is insufficient statistical content within the proposed curriculum, and insufficient attention given to promoting students' acquisition of transferable skills. A common criticism of present GCSE Mathematics is that it does not provide students with the ability to use their knowledge outside the mathematics classroom. This is something that must be embedded in the curriculum from an early stage, for example through harmonising as far as possible things such as notation and terminology. That is particularly important for statistics, which is used in many other subjects, both at GCSE and beyond. Statistics has the potential to be a facilitating skill, underpinning learning across a range of subjects. In its wider approach to curriculum design, the government must pay attention to the way in which statistics feeds into other subjects. For example, in the KS3 programme of study for geography is included the statement 'use Geographical Information Systems (GIS) to view, analyse and interpret places and data', which links clearly to statistical skills.

Non-specialist teachers in primary schools, in particular, are likely to find it difficult to interpret some of the statements. The layout of the curriculum poses an enormous challenge for primary teachers, who have many pages of year-by-year programmes of study for English, mathematics and science to contend with, and only a brief list by Key

Stage in each of 9 other subjects. We note that, while there is a glossary for the English programme of study, there is no such thing for other subjects.

Though it is not our role to set out an alternative curriculum, the RSS would be delighted to be involved in discussions about how a revised programme of study might look. We would wish to draw the government's attention to the New Zealand curriculum in Mathematics and Statistics (a summary of which is attached). It is particularly notable for its integration of mathematics and statistics, and for the clarity in progression between levels, and how understanding and mastery of concepts are developed and built upon. As evidenced by research published earlier this year by the Nuffield Foundation, New Zealand has a very high participation rate in post-16 mathematics, especially among countries where such participation is voluntary.

**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?**

<input type="checkbox"/>	<input checked="" type="checkbox"/> Sufficiently ambitious	<input type="checkbox"/>	<input checked="" type="checkbox"/> Not sufficiently ambitious	<input type="checkbox"/>	<input checked="" type="checkbox"/> Not sure
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In our view, the mathematics programmes are appropriately ambitious for the most able students but too ambitious for those who are average or below.

In that context, there are particular dangers around the primary curriculum being set out year by year. Teachers will, because the curriculum says that they must, teach the whole content to all pupils regardless of their ability and prior understanding. There is a risk that we perpetuate, or even exacerbate, the situation where a large number of pupils are turned off mathematics and anything to do with numbers.

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

In *Reform of the National Curriculum in England*, it is stated that there will be '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'.

The current level structure and descriptors support schools in considering issues of progress. To remove these levels and replace them with a single statement of attainment risks the loss of a structure that supports understanding of pupil progression.

We would welcome, also, a statement as to how attainment at Key Stage 2 will be measured, since the proposal in the Secondary School Accountability consultation to use this as a basis for value-added measurements implies that this measure cannot be simply 'pass' or 'fail'.

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

<input type="checkbox"/>	<input checked="" type="checkbox"/> Agree	<input checked="" type="checkbox"/> √	<input checked="" type="checkbox"/> Disagree	<input type="checkbox"/>	<input type="checkbox"/> Not sure
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There is not adequate progression within statistics. It is presented as a set of techniques rather than as a problem solving process.

**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?**

<input type="checkbox"/>	Agree	<input type="checkbox"/>	Disagree	<input checked="" type="checkbox"/>	Not sure
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This is outside our area of professional interest and expertise.

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

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	Not sure
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In mathematics, the proposed National Curriculum places greater demand in most areas. That is not, however, the same thing as higher standards. Standards are a measure of what people actually attain rather than what is asked of them.

We fear that, were this proposal to be implemented, the overall level of students' engagement would decrease, and so there would be a reduction in standards.

**9 What impact - either positive or negative - will our proposals have on the 'protected characteristic' groups?**

This is outside our area of professional interest and expertise.

**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?**

What is of concern to parents is how far what is being taught matches the learning stage of their own particular child, and how the curriculum is being applied to meet that aim. The National Curriculum as such will probably not make it clear to parents what their children 'should be learning'; this information will come from their schools' detailed curriculum, covering all subjects. Most parents will not check their children's school curriculum against the National Curriculum.

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

A substantial programme of CPD for **all** teachers will be essential. This needs to be on-going, and not merely a one-off. As regards statistics, in addition to the need for curriculum changes as discussed elsewhere, mathematics teachers will require a programme of CPD specifically aimed at improving their ability to teach statistics. The Royal Statistical Society Centre for Statistical Education (RSSCSE) has expertise in this area.

New, **high quality** textbooks and teaching materials will be needed.

We have serious concerns about the practicality of changes on this scale being effectively implemented on this timescale, especially given the pressure on schools' budgets.

**12 Who is best placed to support schools and/or develop resources that schools will need to teach the new National Curriculum?**

The traditional providers of CPD are local authorities, higher education, subject-based bodies, examination boards, and private companies. Recent changes mean that several of these are unable or ill-equipped to make the necessary provision. Consequently, we do not believe the capacity exists to provide the volume of CPD required in the available time.

Some commercial publishers might see it as being in their interest to rush out new textbooks and teaching materials; there will be profits to be made. However, there is a trade off between time, cost and quality. The risks will be especially acute given the need for materials to be trialled before publication.

Finally – given budgetary pressures – it is unlikely that schools will be able to pay for new books in all National Curriculum subjects, along with CPD for teachers.

**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?**

<input type="checkbox"/>	Agree	<input type="checkbox"/>	Disagree	<input checked="" type="checkbox"/>	Not sure
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This is outside our area of professional interest and expertise.

**14 Do you have any other comments you would like to make about the proposals in this consultation?**

While we welcome the attempt to reduce the gap in performance between the highest and lowest attaining students, this cannot be achieved merely by the words in the curriculum. What happens in classrooms is key.

It is crucial that policy is fully informed by the consideration of the relevant evidence. We believe that it is in the interests of everyone that decisions are based on consideration of the knowledge, experience and expertise encapsulated in the responses of organisations such as our own.

**15 Please let us have your views on responding to this consultation (e.g. the number and type of questions, whether it was easy to find, understand, complete etc.)**

Generally, the consultation asks open, non-directive questions which should elicit unbiased responses. However, questions 2, 4, 7 and 13 are designed with a particular viewpoint in mind, and care will be needed in interpreting the results to ensure that conclusions drawn are supported by the information obtained.

Thank you for taking the time to let us have your views. We do not intend to acknowledge individual responses unless you place an 'X' in the box below.

**Please acknowledge this reply**

**E-mail address for acknowledgement:**

Here at the Department for Education we carry out our research on many different topics and consultations. As your views are valuable to us, would it be alright if we were to contact you again from time to time either for research or to send through consultation documents?

<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
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All DfE public consultations are required to meet the Cabinet Office [Principles on Consultation](#)

The key Consultation Principles are:

- departments will follow a range of timescales rather than defaulting to a 12-week period, particularly where extensive engagement has occurred before
- departments will need to give more thought to how they engage with and consult with those who are affected
- consultation should be 'digital by default', but other forms should be used where these are needed to reach the groups affected by a policy; and
- the principles of the Compact between government and the voluntary and community sector will continue to be respected.

Responses should be completed on-line or emailed to the relevant consultation email box. However, if you have any comments on how DfE consultations are conducted, please contact Carole Edge, DfE Consultation Coordinator, tel: 0370 000 2288 / email: [carole.edge@education.gsi.gov.uk](mailto:carole.edge@education.gsi.gov.uk)

**Thank you for taking time to respond to this consultation.**

Completed questionnaires and other responses should be sent to the address shown below by 16 April 2013

Send by post to:

Consultation Unit,  
Area 1c,  
Castle View House,  
East Lane,  
Runcorn,  
Cheshire,  
WA7 2GJ.

Send by e-mail to: [NationalCurriculum.CONULTATION@education.gsi.gov.uk](mailto:NationalCurriculum.CONULTATION@education.gsi.gov.uk)