



Department
for Education

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Respond by 3 February 2014
Ref: Department for Education

National curriculum reform (England): KS4 English and mathematics

National curriculum reform (England): key stage 4 English and mathematics

This consultation seeks views on draft programmes of study for English and mathematics at key stage 4. It follows the publication of the national curriculum framework document on 11 September 2013 which covered the whole national curriculum apart from the programmes of study for English, mathematics and science at key stage 4.

To Primary schools; secondary schools; special schools; organisations representing school teachers; subject associations; parents; young people; higher education; further education; academies/free schools; employers/business sector; local authorities; teachers

Issued 2 December 2013

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

email: KS4EnglishmathsPoS.CONSULTATION@education.gsi.gov.uk

Contact details

If your enquiry is related to the DfE e-consultation website or the consultation process in general, you can contact the Ministerial and Public Communications Division by email: consultation.unit@education.gsi.gov.uk or by telephone: 0370 000 2288 or via the department's '[contact us](#)' page.

1 Introduction

- 1.1 The new national curriculum will be taught from September 2014 except primary English, mathematics and science for years 2 and 6, which will be taught from September 2015 -; and for English, mathematics and science for key stage 4 will be phased in from September 2015, alongside the timetable for introducing new GCSEs in these subjects. The key stage 4 programmes of study in English, mathematics and science are being developed in tandem with the content of new GCSEs.

The review of the national curriculum 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; and
- beyond that core, to allow teachers greater freedom to use their professionalism and expertise in order to help all children realise their potential.

The department undertook a consultation on draft programmes of study for most of the national curriculum between February and April 2013. Following this consultation, the proposals were revised and a further one-month consultation was undertaken on 8 July. The outcome of the latter consultation, and the new programmes of study, can be accessed via these links:

Consultation outcome:

<https://www.gov.uk/government/consultations/national-curriculum-review-new-programmes-of-study-and-attainment-targets-from-september-2014>

New programmes of study:

<https://www.gov.uk/government/collections/national-curriculum>

The national curriculum acts as a benchmark for all schools and provides young people with the knowledge they need to move confidently and successfully through their education. The content at all key stages compares favourably with the most successful international curricula in the highest performing jurisdictions and set rigorous requirements for pupil attainment. The proposals for English and mathematics at key stage 4 have been developed to meet these high

expectations.

The draft programmes of study for key stage 4 English and mathematics build on the respective key stage 3 programmes of study. They are consistent with the relevant subject content for new GCSEs in English language and literature and in mathematics, which were published on 4 November 2013 and can be accessed via these links:

English:

<https://www.gov.uk/government/publications/gcse-english-language-and-gcse-english-literature-new-content>

Mathematics:

<https://www.gov.uk/government/publications/gcse-mathematics-subject-content-and-assessment-objectives>

For more highly attaining pupils, the mathematics programme of study also includes the more challenging additional GCSE content (in bold).

2 Scope and coverage of the consultation

- 2.1** This consultation covers the government's proposals for changes to the programmes of study for key stage 4 English and mathematics. The consultation will close on 3 February 2014. We expect to consult on the proposed programme of study for science around Easter (April 2014).

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.

We believe that it is important to consider the content of these proposed programmes of study alongside the new requirements for the subject content of the GCSEs in these subjects, to ensure that the curriculum and qualifications are fully coherent. The key stage 4 programmes of study for English and mathematics will be introduced from September 2015, alongside first teaching of the new qualifications.

3 Using the consultation document

- 3.1 Respondents should refer to '*programmes of study for key stage 4 English and mathematics*' when responding to this consultation.

The programmes of study

The draft programmes of study seek to ensure that the curriculum and qualifications are fully coherent.

Question 1: *Do you have any comments on the content set out in the draft programmes of study for English?*

No

Question 2: *Do you think the draft programme of study for English provides for appropriate progression from key stage 3?*

No comment

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

- In the section about reasoning mathematically, it is unclear what is meant by “express their arguments formally” in the following bullet point “explore what can and cannot be inferred in statistical and probabilistic settings, and express their arguments formally”
- Restricting exponential graphs $y = k^x$ to integer values of k is a mismatch with the GCSE content. The use of exponential graphs in financial contexts of loans and savings is natural at this level, links to percentages and requires non-integer values of k .
- In order to make sense, the first bullet point in the geometry section should end with “for enlargements”.
- The following phrase in the statistics section is wrong: “appropriate measures of central tendency, including modal class and spread, **quartiles and inter-quartile range**” Spread, quartiles and inter-quartile range are not measures of central tendency. The wording in the GCSE content is correct and should be adopted.
- In order to facilitate the desired links to other subjects, the statistical problem solving cycle should be included explicitly within the Programme of Study; an appropriate place for this would be in the section on problem solving.

3 Using the consultation document

Question 4: *Do you think the draft programme of study for mathematics provides for appropriate progression from key stage 3?*

With the amendments described in question 3, it would.

Question 5: *Do any of the proposals have potential to have a disproportionate impact, positive or negative, on specific pupil groups, in particular the 'protected characteristic' groups? (the relevant protected characteristics are disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation); if they have potential for an adverse impact, how can this be reduced?*

In KS4 mathematics it is important that sufficient emphasis is given to consolidating understanding from KS3 and showing how it is linked to new content at KS4. This shows how mathematics develops as a coherent discipline and helps to build learners' confidence. Evidence suggests that this tends to be especially important for girls, supporting their progression to level 3 mathematics post-16.

For girls, enjoyment of GCSE Mathematics is a very significant factor in choosing to study A level Mathematics.

'Girls were significantly more likely than boys to say they had based their choice on previous success. They were twice as likely as boys to say that they chose mathematics because of their enjoyment of the subject.' (Evaluation of participation in GCE Mathematics, Final Report, QCA, 2007)

4 Legislative context

- 4.1** The Secretary of State proposes to make provision under part 6 of the Education Act 2002 having the effect that the current programmes of study for key stage 4 English and mathematics – which are disapplied for school years 2013 to 2014 and 2014 to 2015 – will be revoked and replaced with new ones from September 2015; Section 96 of the Education Act 2002 requires the Secretary of State to consult those with an interest in the proposals.

5 How to respond

- 5.1** Consultation responses can be completed online at: www.education.gov.uk/consultations,

Or by emailing or posting a completed response form:

by email

KS4EnglishmathsPoS.CONULTATION@education.gsi.gov.uk

or by post:

Ministerial and Public Communication Division, Level 2, Department for Education, Mowden Hall, Staindrop Road, DARLINGTON DL3 9BG.

6 Additional copies

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

7 Plans for publishing the results of this consultation

7.1 Plans for making results public

The consultation will close on 3 February 2014. We plan to publish a summary of the responses to the consultation on the e-consultation website in March 2014.