GCSE Reform Consultation Questions

June 2013
Annex 1: All questions

This consultation is about the regulatory aspects of proposed changes to GCSEs taken by students in England.

We would like to know your views on the proposals before we put in place regulatory requirements for reformed GCSEs.

We will publish the evaluation of responses to the consultation later this year. In order for us to evaluate responses properly, we need to understand who is responding and in what capacity. Therefore, however you respond, we will only be able to consider your responses to the consultation questions if you complete the information page.

Details on how to respond are given below.

Please note we may publish all or part of your response unless you tell us in your answer to the confidentiality question below that you want us to treat your response as confidential.

The Department for Education (DfE) is running a parallel consultation on the content of the reformed GCSEs. If you have views on the draft content you should respond to the DfE’s consultation. If you do include in your response to this Ofqual consultation comments that should have been directed to the DfE we may copy these to the DfE unless you state that your response is confidential.

The deadline for responses to this consultation is **17.00 on 3rd September 2013.**

**How to respond to this consultation**

Please respond to the consultation questions using one of these methods.


Email your completed response document to consultations@ofqual.gov.uk – please include the consultation title in the subject line of the email and be clear who is responding and in what capacity.

Post your response to GCSE Reform consultation – June 2013, Ofqual, Spring Place, Coventry Business Park, Herald Avenue, Coventry, CV5 6UB.

_________________________

Information pages

About you*

Your details:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Professor Alice Rogers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position:</td>
<td>Education Secretary</td>
</tr>
<tr>
<td>Name of organisation or group (if applicable):</td>
<td>London Mathematical Society</td>
</tr>
<tr>
<td>Address:</td>
<td>57-58 Russell Square, London, WC1B 4HS</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:education@lms.ac.uk">education@lms.ac.uk</a></td>
</tr>
<tr>
<td>Telephone number:</td>
<td>020 7927 0801</td>
</tr>
</tbody>
</table>

Would you like us to treat your response as confidential?*

( ) Yes (✓) No

Are the views expressed on this consultation an official response from the organisation you represent or your personal view?*

( ) Personal views

(✓) Official response from an organisation/group (complete the type of responding organisation)

If you ticked ‘personal views’, are you a …

( ) Student

( ) Parent/carer

( ) Teacher (but not responding on behalf of a school)

( ) Other (including general public) (please state capacity) _____________________
If you ticked ‘official response from an organisation or group’, please respond accordingly,

**Type of responding organisation**

( ) Awarding organisation for 14–19 general qualifications

( ) Awarding organisation for 14–19 vocational qualifications

( ) Awarding organisation for vocational and/or professional qualifications

( ) Awarding organisation for other kinds of qualifications

( ) School/college (please complete the next question)

( ) Private training provider

( ) Higher education institute

( ) Employer

( ) Government body/organisation (national and local)

(✓) Other representative group/interest group (please skip to type of representative group/interest group)
Type of representative group/interest group

( ) Group of awarding organisations
( ) Union
( ) Sector skills council
( ) Academy chain
( ) Employer/business representative group
( ) Equality group
( ) Other voluntary or community group
(✓) None of the above Learned Society

Nation*

(✓) England
( ) Wales
( ) Scotland
( ) Northern Ireland
( ) Other EU country (please state which) _______________________
( ) Non-EU country (please state which) _______________________

*Denotes mandatory fields
Consultation questions

Before answering the questions below we have some general comments to make.

This response relates to mathematics. The London Mathematical Society is pleased to have this opportunity to respond to this consultation, and particularly welcomes the recognition that the structure of GCSE will need to vary from subject to subject.

We have, however, had difficulty in responding to this consultation because it does not appear to take into account the need for a double GCSE structure. Adrian Smith’s original proposal [Making Maths Count, 2004] was based on the observation that the curriculum time and content covered by the full mathematics curriculum up to the end of KS4 clearly warrants an assessment volume at least equivalent to that for double award Science, and to English (Language and Literature). Our response to the DfE consultation on GCSE content considers this matter further.

If such a double award is to be made available (based on the standard KS3-4 curriculum), we must find some way of ensuring that it is genuinely available in all schools. We note that, as in Science, the advantages of making such a double award available may be lost if one were to insist that achieving the mathematical equivalent of "single Science" should be deemed a prerequisite to A level.

We have made responses to and comments on several of the individual questions below to give some indication of how things might best be developed, but would emphasise that the structure of GCSE mathematics cannot be decided at this stage because the form of the double mathematics GCSE has yet to be decided.

Section 1 Scope, purpose and context of the consultation

1. The proposed primary purposes of the reformed GCSEs will be to provide evidence of students’ achievements against demanding and fulfilling content and a strong foundation for further academic and vocational study and for employment. The reformed GCSEs should also provide a basis for schools to be held accountable for the performance of all their students. These proposed purposes are consistent with the purposes set out in the Secretary of State’s letter2. To what extent do you agree with these propositions?

   ( ) Strongly agree
   ( ) Agree
   ( ) Disagree

2. Do you have any comments to make on these propositions?

We believe that the aim of GCSE must be the assessment of students' achievements, and this must be done in a way to fairly measure the achievement of each individual, encourage valuable learning and lead to successful progression. It is widely recognised that the current system of using GCSE as a school accountability measure has had many damaging consequences, and can lead to a conflict between what is best for an individual and what is best for a school. This makes us extremely cautious about using GCSE results for accountability. It is possible that a more carefully constructed accountability measure based on a wider set of criteria (including use of ALL grades achieved and successful progression to level 3 study, and not heavily dependent on one grade boundary) would remove these undesirable consequences, but the scheme will need careful construction by a team of respected and experienced people which is given time to complete the task well.

Section 2 Key design features – tiering

3. To address concerns that tiering can limit students' ambitions we propose to apply the principle that qualifications should only be tiered if:

- manageable assessments cannot be designed that would both allow students at the lower end of the ability range to demonstrate their knowledge, skills and understanding in a subject, and that would stretch the most able students; and
- content that would be exclusive to the higher tier can be identified.

To what extent do you agree with this proposition?

( ) Strongly agree

( ) Agree

(✓) Disagree

( ) Strongly disagree

( ) Don’t know/no opinion

In subjects such as mathematics where the difficulty of a question is determined by the question itself rather than the way in which it is marked, tiered papers may be necessary to achieve the first of the two points above even when there is no exclusive higher level content.
We have applied this principle on tiering to the following subjects: English language, English literature, mathematics, biology, chemistry, physics, double award science, geography and history. As such:

4. The reformed GCSE in mathematics should be tiered. To what extent do you agree with this proposition?
   - (✓) Strongly agree*
   - ( ) Agree
   - ( ) Disagree
   - ( ) Strongly disagree
   - ( ) Don’t know/no opinion
   *This opinion may be modified when the double GCSE structure is determined

10. Where tiering is used, which of the following models – adjacent levels, core and extension, overlapping tiers – would you prefer? Please rank the options in order of your preference (1–3).
   - ( ) Adjacent levels*
   - ( ) Core and extension model*
   - ( ) Overlapping tiers*
   * This can only be decided when the double GCSE structure is determined

Why do you prefer the model you have ranked as 1?

We believe that in mathematics papers set at three levels is the best way of giving an assessment which allows all students to show what they have achieved while reducing the danger that students will not dare to try the harder material; it is essential that all students are obliged to take papers at at least two levels and are entitled to take papers at all levels. (These features are possible within all three models above.)

11. Do you have any additional comments to make on tiering?

Given the danger that tiering can cap aspirations, we believe all students should be entitled to take papers at all levels, and that any accountability measure must avoid encouraging schools to play safe by entering for low tiers.
Section 3: Key design features: assessment arrangements

12. The default position should be that the reformed GCSEs are assessed by way of externally set and marked examinations, except where subject content cannot be validly assessed in this way. To what extent do you agree with this proposition?
   
   ( ) Strongly agree
   (✓) Agree
   ( ) Disagree
   ( ) Strongly disagree
   ( ) Don’t know/no opinion

13. Where the final grade is based on externally set and marked exams only, there should be a minimum total exam time (the total time could be divided between different papers). To what extent do you agree with this proposition? See page 37.
   
   (✓) Strongly agree
   ( ) Agree
   ( ) Disagree
   ( ) Strongly disagree
   ( ) Don’t know/no opinion

14. The proposal is for a minimum total exam time of 3.5 hours for subjects where the final grade is based on externally set and marked exams only. That is English language, English literature, mathematics, geography and history.

   Is 3.5 hours …
   
   ( ) Too much
   ( ) About right
   (✓) Too little*

   * This opinion may be modified when the double GCSE structure is determined

   A minimum of 4 hours would allow two two-hour exam papers. Papers of at least this length are required so that long, problem-type questions can be set.
17. Reformed GCSEs will be linear; with all exams taken at the end of the course (non-exam assessments may be completed at different times). To what extent do you agree with this proposition?

( ) Strongly agree
(✓) Agree
( ) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

18. All reformed GCSEs will include an element of synoptic assessment. To what extent do you agree with this proposition?

(✓) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

19. Externally set and marked assessments should normally only be taken at one point during the year – in May and June. To what extent do you agree with this proposition?

( ) Strongly agree
(✓) Agree Subject to 20 below
( ) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

20. An exception should be made to the provision that exams should only be taken in May and June, so that students may re-sit mathematics and English language in November. To what extent do you agree with this proposition?

( ) Strongly agree
(✓) Agree Subject to 21 below
( ) Disagree
( ) Strongly disagree
21. November re-sits should be restricted to students in Year 12 and above. To what extent do you agree with this proposition?

( ) Strongly agree
(✔) Agree
( ) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

25. Do you have any comments on the proposed assessment arrangements for the reformed GCSEs?

These cannot be fully determined for mathematics until the nature of the double GCSE is determined

Section 4: Key design features: reporting student performance

26. Student performance in the reformed GCSEs should be reported using grades (rather than marks, scaled scores or percentile scores). To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree
(✔) Don’t know/no opinion until double mathematics GCSE is determined

27. If grades were not used, which of the alternatives would you prefer?

( ) Marks
( ) Scaled scores
( ) Percentile scores
( ) Other

28. Grades could be used alongside marks, scaled scores or percentile scores. Would you like to see grades and more granularity of reporting as well?

( ) Grades alone
29. Eight grades would allow for sufficient differentiation of performance between students. To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree

(✔) Don’t know/no opinion until double mathematics GCSE is determined

30. The number of grades at the higher and middle performance range should be increased to allow for greater differentiation. To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree

(✔) Don’t know/no opinion until double mathematics GCSE is determined

31. The number of grades at the lower end of the performance range should be reduced. To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree

(✔) Don’t know/no opinion until double mathematics GCSE is determined
32. Grades should be described using a new system to differentiate them from current GCSEs. To what extent do you agree with this proposition?

( ) Strongly agree
(✓) Agree
( ) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

33. Grades should be described using numbers. To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree
(✓) Don’t know/no opinion until double mathematics GCSE is determined

34. If grades are described using numbers, the highest numbered grade should signify the highest level of achievement. To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree
(✓) Don’t know/no opinion until double mathematics GCSE is determined

35. What information would students and users of qualifications find valuable in addition to the overall grade about students’ performance?

Do not know until double mathematics GCSE is determined

36. How would any additional information about students’ performance be used by students and users of qualifications?

Do not know until double mathematics GCSE is determined
37. If more detailed information about student performance in a subject was to be provided, it would result in significantly more assessment and higher costs. Would these greater resource implications be justified?

(✓) Yes if this was done in an effective way

( ) No

38. Do you have any other comments about reporting student performance?

________________________________________________________________________________________________________________________

________________________________________________________________________________________________________________________

Section 5: Full and short course GCSEs

39. The time it will typically take a student to complete a course of study for one of the reformed GCSEs should be the same as or similar to the time required for one of the current GCSEs (double award science will be the same as or similar to two current GCSEs). This means, as is the case with current GCSEs, that students would normally study reformed GCSEs over two years. To what extent do you agree with this proposition?

( ) Strongly agree

( ) Agree

( ) Disagree

(✓) Strongly disagree

( ) Don’t know/no opinion

GCSE mathematics is based on the study of mathematics up to and including Key Stage 4, not simply on some two-year course at Key stage 4.

40. Awarding organisations should be able to offer stand-alone short courses of the reformed GCSEs which will not contribute to a full GCSE. To what extent do you agree with this proposition?

( ) Strongly agree

( ) Agree

( ) Disagree

( ) Strongly disagree

(✓) Don’t know/no opinion In Mathematics awarding bodies provide assessment, not courses.
Section 6: Regulating the reformed GCSEs

41. Awarding organisations will be required to use and assess the subject content requirements as set out by the Department for Education in the development of reformed GCSEs (for those subjects for which the Department for Education consults on and publishes subject content requirements). To what extent do you agree with this proposition?

(✔) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

42. Exam boards should be required to develop assessment strategies for their reformed GCSEs. To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
✔) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

The assessment strategy for mathematics should be part of the criteria which all awarding bodies must satisfy, and be constructed by a competent, respected body of mathematicians given time to complete the task.

43. Exam boards should be required to review systematically the effectiveness of their assessments for each of their reformed GCSEs. To what extent do you agree with this proposition?

( ) Strongly agree
( ) Agree
( ) Disagree
( ) Strongly disagree
(✔) Don’t know/no opinion and at OfQual/DfE level

This should of course be done by each exam board, but also by a competent mathematics team, which the DfE should ensure exists, looking at all boards. The membership of this team, and its operations, should be transparent.
44. The Apprenticeships, Skills, Children and Learning Act 2009, requires us to consult before we impose an accreditation requirement on exam boards. Do you agree that the reformed GCSEs should be subject to an accreditation requirement, that is, that they must be checked by Ofqual before they can be made available?

(✓) Yes

( ) No

45. Do you have any other comments on the regulation of the reformed GCSEs?

Early and multiple entry should at least be discouraged
Section 7: Subject-specific features of the reformed GCSEs

46. Please indicate whether you have read the Department for Education’s subject content consultation document and associated documentation by ticking one box per row:

<table>
<thead>
<tr>
<th>Subject</th>
<th>I have read the DfE subject content</th>
<th>I have not read the DfE subject content</th>
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</thead>
<tbody>
<tr>
<td>English language</td>
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<td>English literature</td>
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<td>Mathematics</td>
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<tr>
<td>Sciences (biology, chemistry, physics and double award science)</td>
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<td>Geography</td>
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<td>History</td>
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Mathematics

53. The Department for Education’s draft mathematics content can all be assessed by externally assessed written exams only. To what extent do you agree with this proposition?

( ) Strongly agree
(✓) Agree
( ) Disagree
( ) Strongly disagree
( ) Don’t know/no opinion

54. Do you have any comments, other than about the detailed syllabus, which is being dealt with through the Department for Education’s consultation, about the proposed design requirements for the reformed GCSEs in mathematics?

We are concerned that the whole process of designing the reformed GCSE is coming at a stage when (a) the Key Stage 4 National Curriculum for Mathematics has not been completed and (b) the mathematics linked pair pilot
has not been evaluated. We do not believe that the reforms should be designed at this stage.
Contact

Would you be happy for us to contact you again in relation to this consultation response? (✓) Yes ( ) No

Email address of key contact person to whom we may speak with about your response to this consultation* education@lms.ac.uk

Additional information

How did you find out about this consultation?

( ) Ofqual’s newsletters or other communications

( ) From Ofqual’s website

( ) Media/press

( ) Via internet search

( ) Via another organisation (please state which) ___________________

(✓) Other (please state how) direct approach from DfE

We want to write clearly, directly and put the reader first. Overall, do you think we have got this right in this document?

( ) Yes

( ) No

Do you have any comments or suggestions about the style of writing?

It would have been preferable if the structure of the questionnaire could have allowed comment on the answer to each question, as the options offered were not, and could not be, sufficient to fully convey a response.
We wish to make our publications widely accessible. Please contact us if you have any specific accessibility requirements.