

The Mathematical Association's Response

Regulating Use of Calculators in New GCSEs, AS and A Levels consultation on Conditions

How to respond to this consultation

The closing date for responses is 11 January 2016.

Please respond to this consultation in one of three ways:

- Complete the online response at www.surveygizmo.com/s3/2461569/regulating-use-of-calculators-in-new-gcse-as-and-a-levels.
- Email your response to consultations@ofqual.gov.uk – please include the consultation title (Calculators Consultation 2015) in the subject line of the email and make clear who you are and in what capacity you are responding; or
- Post your response to: Calculators Consultation 2015, Ofqual, Spring Place, Herald Avenue, Coventry, CV5 6UB, making clear who you are and in what capacity you are responding.

Evaluating the responses

To evaluate responses properly, we need to know who is responding to the consultation and in what capacity. We will therefore only consider your response if you complete the information page.

Any personal data (such as your name, address and any other identifying information) will be processed in accordance with the Data Protection Act 1998 and our standard terms and conditions.

We will publish our evaluation of responses. Please note that we may publish all or part of your response unless you tell us (in your answer to the confidentiality question) that you want us to treat your response as confidential. If you tell us you wish your response to be treated as confidential, we will not include your details in any published list of respondents, although we may quote from your response anonymously.

Please respond by 11 January 2016.

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Responding to the consultation

Your details

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Please answer all questions marked with a star*

Name

Peter Ransom

Position

Chair of Council

Organisation name

The Mathematical Association

Address

259 London Road,

Leicester

LE2 3BE

Email

senioradministrator@m-a.org.uk

Telephone

0116 221 0013

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

If you answer yes, we will not include your details in any list of people or organisations that responded to the consultation.

Yes No

Is this a personal response or an official response on behalf of your organisation?*

Personal response (please answer the question 'If you ticked "Personal response"...')

Official response (please answer the question 'If you ticked "Official response"...')

If you ticked "Personal response", which of the following are you?

Student

Parent or carer

Teacher (but responding in a personal capacity)

Other, including general public (please state below)

If you ticked "Official response", please respond accordingly:

Type of responding organisation*

Awarding organisation

Local authority

School or college (please answer the question below)

Academy chain

Private training provider

University or other higher education institution

Employer

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Other representative or interest group (please answer the question below)

School or college type

- Comprehensive or non-selective academy
 - State selective or selective academy
 - Independent
 - Special school
 - Further education college
 - Sixth form college
 - Other (please state below)
-

Type of representative group or interest group

- Group of awarding organisations
 - Union
 - Employer or business representative group
 - Subject association or learned society
 - Equality organisation or group
 - School, college or teacher representative group
 - Other (please state below)
-

Nation*

- England
- Wales
- Northern Ireland

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Scotland

Other EU country: _____

Non-EU country: _____

How did you find out about this consultation?

Our newsletter or another one of our communications

Our website

Internet search

Other

May we contact you for further information?

Yes No

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Questions

Question 1: To what extent do you agree or disagree with our proposed approach to regulating the use of calculators in new AS and A level qualifications?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

On one level what is proposed is a sensible and pragmatic response to a changing situation. However, The Mathematical Association is concerned that discussion of when the use of calculators (and with what capabilities) is being removed from the public forum to a private dialogue between Ofqual and each awarding organisation. This could mean that in the future there will not be an opportunity to comment on the use of calculators in examinations. The Mathematical Association would like to see some safeguards in place to ensure that this does not happen.

Furthermore, we disagree with the idea that the use of calculators is the same in all subjects and therefore we believe that the regulations cannot be the same. A different approach is needed in mathematics.

In other subjects you are expected to be able to use numbers and do calculations. Mathematics may be being used as a tool and liberal use of a calculator to carry out that auxiliary role may be appropriate. In some cases skill in the use of calculators may be something that will be tested. However, in mathematics you are expected to demonstrate a deep understanding of numbers and their architecture, and this would imply a different approach to the use of calculators.

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Question 2: To what extent do you agree or disagree with our proposed changes to our approach to regulating the use of calculators in exams for new GCSEs?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

On one level what is proposed is a sensible and pragmatic response to a changing situation. However, The Mathematical Association is concerned that discussion of when the use of calculators (and with what capabilities) is being removed from the public forum to a private dialogue between Ofqual and each awarding organisation. This could mean that in the future there will not be an opportunity to comment on the use of calculators in examinations. The Mathematical Association would like to see some safeguards in place to ensure that this does not happen.

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Question 3: Do you have any comments on our proposed new Conditions for all new GCSE, AS and A level qualifications?

- Yes No

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Question 4: Do you have any comments on our proposed changes to our existing Conditions and requirements for new GCSEs in mathematics?

Yes No

The suggested split for calculator and non-calculator content within in exams seems sensible and gives flexibility to allow for the best use of technology. The capabilities of the suggested technology seem fair and sufficient for GCSE content.

Question 5: We have not identified any ways in which the proposals for regulating use of calculators in exams would impact (positively or negatively) on persons who share a protected characteristic.¹ Are there any potential impacts we have not identified?

Yes No

Question 6: Are there any additional steps we could take to mitigate any negative impact resulting from these proposals on persons who share a protected characteristic?

Yes No

Question 7: Have you any other comments on the impacts of the proposals on students who share a protected characteristic?

Yes No

¹ 'Protected characteristic' is defined in the Equality Act 2010. Here, it means disability, racial group, age, religion or belief, pregnancy or maternity, sex, sexual orientation and gender reassignment.

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Accessibility of our consultations

We are looking at how we provide accessible versions of our consultations and would appreciate it if you could spare a few moments to answer the following questions. Your answers to these questions will not be considered as part of the consultation and will not be released to any third parties.

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

Yes No

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

Yes No

Do you have any special requirements to enable you to read our consultations? (for example, screen reader, large text, and so on)

Yes No

Which of the following do you currently use to access our consultation documents? (select all that apply)

- Screen reader / text-to-speech software
- Braille reader
- Screen magnifier
- Speech-to-text software
- Motor assistance (blow-suck tube, mouth stick, and so on)
- Other

Which of the following document formats would meet your needs for accessing our consultations? (select all that apply)

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- A standard PDF
- Accessible web pages
- Large-type PDF (16 point text)
- Large-type Word document (16 point text)
- eBook (Kindle, iBooks, or similar format)
- Braille document
- Spoken document
- Other

How many of our consultations have you read in the last 12 months?

- 1
- 2
- 3
- 4
- 5
- More than 5