

RSS response to Ofqual consultation on GCSE Statistics: Conditions and guidance

Responding to the consultation: Your details

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 (X) No

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

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

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

Type of responding organisation*

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

Type of representative group or interest group

(X) Subject association or learned society

Nation* (X) England

May we contact you for further information?

(X) Yes () No

Questions

Question 1: To what extent do you agree or disagree that we should introduce a Condition which requires exam boards to comply with the relevant subject content and assessment objectives?

- () Strongly agree (X) Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

Please explain your reasons:

.....

Question 2: To what extent do you agree or disagree with our proposed approach to tolerances for assessment objective weightings in GCSE statistics?

() Strongly agree
() Agree
(X) Neither agree nor disagree
() Disagree
() Strongly disagree

Please explain your reasons:

We do not disagree with the principle of allowing flexibility in weightings annually as for maths and science, but think that the mechanism of meeting this 'on average' across a four year period is far from ideal, as it is complex and will not have consistent implications each year. There will be no flexibility in the last year of the specified period, and very little flexibility in the penultimate year, as exam boards seek to resolve their average score. Leaving the rule as the first bullet point (allowing weighting of assessments in any given year to vary by up to ± 3 per cent) seems more appropriate as the implications for each year would be consistent.

Question 3: To what extent do you agree or disagree that we should introduce guidance which clarifies how exam boards should interpret our assessment objectives?

(X) Strongly agree
() Agree
() Neither agree nor disagree
() Disagree
() Strongly disagree

Please explain your reasons:

Assessment objectives for GCSE statistics include the application of the statistical enquiry cycle. We strongly agree that guidance on how to interpret objectives is needed, such guidance should in particular help teachers and examiners of the subject to have a shared understanding of practical investigative work in statistics and its relationship to the examination.

Question 4: To what extent do you agree or disagree with our proposed approach to the design of tiered assessments in GCSE statistics?

() Strongly agree(X) Agree() Neither agree nor disagree() Disagree

() Strongly disagree

Please explain your reasons:

.....

Question 5: To what extent do you agree or disagree that mixed-tier entry should be prohibited in GCSE statistics?

() Strongly agree
(X) Agree
() Neither agree nor disagree
() Disagree
() Strongly disagree

Please explain your reasons:

Question 6: To what extent do you agree or disagree with our proposed approach to assessing the full grade range in GCSE statistics?

() Strongly agree
(X) Agree
() Neither agree nor disagree
() Disagree
() Strongly disagree

Please explain your reasons:

.....

Question 7: To what extent do you agree or disagree with our proposed approach to securing comparability across tiers in GCSE statistics?

- () Strongly agree
- (X) Agree
- () Neither agree nor disagree
- () Disagree
- () Strongly disagree

Please explain your reasons:

.....

Question 8: Do you have any comments on our proposed Conditions and requirements for GCSE statistics?

(X) Yes () No

We note that coursework remains required and weighted in certain other reformed GCSEs including Computer Science (20% of marks), Modern Foreign Languages (oral assessment - 25%), Engineering (40%) and Design and Technology (50%). The conditions and regulations for these subjects permit practical tasks set either by teachers or by exam boards. This same provision has not been made for GCSE statistics meaning that the practical requirements of the subject need addressing by reference to the assessment objectives and associated guidance. As noted in the final subject content published by the Department for Education:

"Statistics is a practical subject and specifications must make explicit reference to how the assessment will focus on the underpinning principles of the statistical enquiry cycle, as detailed in Appendix 3, developed through practical investigations completed as part of the programme of study. Specifications should give students the opportunity to understand that different approaches, including the use of technology, may be appropriate at each stage of the statistical enquiry cycle, and that statistical conclusions are developed through an iterative process of retesting and refinement. Specifications should give students the opportunity to develop an understanding of how the subject content is applied in decision making processes used in the world around them by using realistic data taken from authentic contexts in their studies."

It is highly important for statistics, as for other reformed subjects, that students take part in practical inquiry to a standard that develops their knowledge, understanding and skills. Such experience needs to be well specified including its relationship to the final assessment. Practical work that collects and uses of realistic data for statistical inquiry is an important dimension of this. The ways by which assessments address the principles of practical work are not clearly specified across conditions, requirements and guidance.

Question 9: Do you have any comments on our proposed guidance for GCSE statistics?

(X) Yes () No

Iterative improvement of the guidance should be a priority in order to address practical requirements of the subject, for the reasons outlined above in answer to Question 8.

For information – this consultation response has reflected the views of the Royal Statistical Society, informed in particular by our Education Policy Advisory Group and our strategic goal to support education for statistical literacy.

[Response ends]

Submitted by the Policy & Research Manager on 4 March 2016