

Analysis of Responses to our Consultation on Conditions and Guidance for GCSE Astronomy



March 2016

Ofqual/16/5874

Contents

Executive Summary	2
The consultation on the Conditions and guidance for GCSE Astronomy.....	3
Background	3
1. Who responded?	4
2. Approach to analysis	5
Data presentation	5
3. Views expressed – consultation response outcomes	6
Our approach to regulating GCSE astronomy	6
Our proposed Conditions and guidance.....	8
Equality Impact Assessment	8
Other issues	9
Appendix A: List of organisational consultation respondents	10

Executive Summary

Our consultation about the Conditions and guidance for GCSE astronomy took place between 17th December 2015 and 20th January 2016. The consultation questions were available to either complete online or to download. A copy of the consultation is available at www.gov.uk/government/consultations/gcse-reform-regulations-for-astronomy.

There were seven responses to the consultation – six from organisations, and one individual response.

One respondent did not comment directly on our proposals, but instead provided general comments on the process for reform of GCSEs, AS and A levels.

Two respondents felt that our proposed weighting for observational skills was too low. All other responses were largely supportive of our proposals.

The consultation on the Conditions and guidance for GCSE astronomy

This report is a summary of the views expressed by those who responded to our consultation on the Conditions and guidance for GCSE astronomy which took place between 17th December 2015 and 20th January 2016.

Background

New GCSE, AS and A level qualifications are being introduced in England. We have consulted on and announced our policy on the general design of these new qualifications. We have also set out our policy and technical arrangements for the subjects where first courses began in September 2015,¹ and for the subjects which will be introduced for first teaching from September 2016.²

Following an earlier consultation, we took decisions on the design of the reformed GCSE qualifications in astronomy that are to be introduced for first teaching from September 2017.³

This consultation focused on the regulatory arrangements that we must put in place to make sure that awarding organisations design, deliver and award the new GCSE in astronomy in line with our policy decisions.

¹ New GCSEs in English language, English literature and mathematics, as well as new AS and A levels in art and design, biology, business, chemistry, computer science, economics, English language, English language and literature, English Literature, history, physics, psychology and sociology.

² New GCSEs in art and design, biology, chemistry, citizenship studies, classical Greek, combined science, computer science, dance, drama, food preparation and nutrition, French, geography, German, history, Latin, music, physical education, physics, religious studies and Spanish. New AS and A levels in classical Greek, dance, drama and theatre, French, geography, German, Latin, music, physical education, religious studies and Spanish.

³ www.gov.uk/government/consultations/development-of-new-gcses-and-a-levels-for-teaching-from-2017

1. Who responded?

We received a total of seven responses to our consultation – six from organisations and one individual response. All of the responses were from individuals or organisations based in England.

Table 1: Breakdown of consultation responses

Personal / organisation response	Respondent type	Number
Personal	General public	1
Organisation	Independent school	2
Organisation	Other representative or interest group	2
Organisation	Awarding organisation	1
Organisation	Union	1

2. Approach to analysis

We published the consultation on our website. Respondents could choose to respond using an online form, by email or by posting their answers to the consultation questions to us. The consultation included 12 questions.

This was a consultation on the views of those who wished to participate and while we made every effort to ensure that as many respondents as possible had the opportunity to reply, it cannot be considered as a representative sample of the general public or any specific group.

Data presentation

We present the responses to the consultation questions in the order in which they were asked.

The consultation asked 12 questions and each had a different focus. Respondents could choose to answer all or just some of the questions.

For some of the questions, respondents could indicate the extent to which they agreed with our proposals, using a 5-point scale (Strongly agree, Agree, Neither agree nor disagree, Disagree and Strongly disagree), as well as providing free-text narrative comments on our proposals.

For these questions, we set out respondents' views using the 5-point scale. Where respondents provided further comments, we present these separately.

During the analysis phase we reviewed every response to each question.

3. Views expressed – consultation response outcomes

In this section we report the views, in broad terms, of those who responded to the consultation document. We have structured this around the questions covered in the consultation document.

As noted above, one respondent chose not to answer our questions directly, and instead submitted more general comments. We set these out under ‘Other issues’ below.

A consultation is not the same as a survey and the responses only reflect the views of those who chose to respond. Typically these will be those with strong views and/or particular experience or interest in a topic. What follows is a fair reflection of the views expressed by respondents to the consultation.

A list of the organisations that responded to the consultation is included in Appendix A.

Our approach to regulating GCSE astronomy

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?

One respondent (an organisation) agreed, and three (two organisations, one individual) strongly agreed, that we should introduce a condition that requires exam boards to comply with the subject content and assessment objectives. Two respondents did not use the 5-point scale (‘strongly disagree’ to ‘strongly agree’) to answer the question.

Question 2: To what extent do you agree or disagree that we should introduce guidance which clarifies how exam boards should interpret our assessment objectives?

Two respondents strongly agreed (one organisation, and one personal response), one agreed (an organisation) and one neither agreed nor disagreed (an organisation) that we should introduce guidance clarifying how exam boards interpret our assessment objectives. Two respondents (one independent school, and one other both organisations) did not use the 5-point scale (‘strongly disagree’ to ‘strongly agree’) to answer the question, but commented that additional freedoms should be allowed for astronomy, in comparison to the other sciences.

Question 3: To what extent do you agree or disagree that we should introduce rules for exam assessment to ensure exam boards take a consistent approach to assessing mathematical skills and observational skills in GCSE astronomy?

One respondent (an organisation) agreed, and three (two organisations, one individual) strongly agreed, with this question. Two respondents (both organisations) did not use the 5-point scale ('strongly disagree' to 'strongly agree') to answer the question, but commented that it would be difficult to carry out practical skills assessments in an exam room.

Question 4: To what extent do you agree or disagree with our proposed approach to assessing mathematical skills in exams (including the 20 per cent minimum weighting) for GCSE astronomy?

Three respondents (all organisations) agreed, and three (two organisations, one individual) strongly agreed, with the weighting and approach to assessing mathematical skills.

Question 5: To what extent do you agree or disagree with our proposed approach to assessing observational skills in exams (including the proposed 15 per cent minimum weighting) for GCSE astronomy?

Two respondents (one organisation, one individual) strongly agreed, two (both organisations) agreed, and two (both organisations) strongly disagreed with our proposed approach to assessing observational skills in exams. The free text explanations from those that strongly disagreed referred to the 15% weighting as the focus of their disagreement.

Both respondents who strongly disagreed, favoured a 20% weighting for observational skills, arguing that the observational nature of astronomy is fundamentally different from the experimental approach of the other sciences as there is a greater requirement for practical aspects to be clearly understood and appreciated. They felt that a 15% weighting for the assessment of observational skills is unlikely to be sufficient.

Three respondents commented that comparison with the other sciences was unhelpful, given that astronomy is different in so many ways.

Question 6: To what extent do you agree or disagree with our proposed approach to assessing working scientifically in exams for GCSE astronomy?

Three respondents (two organisations, one individual) strongly agreed, two (both organisations) agreed and one respondent (an organisation) neither agreed nor disagreed with our approach to assessing 'working scientifically'.

Question 7: To what extent do you agree or disagree that we should require exam boards to collect statements from schools which confirm that students have been given reasonable opportunities to carry out observation?

Three respondents (all organisations) strongly agreed, two (both organisations) agreed, and one (personal respondent) neither agreed nor disagreed with Ofqual requiring exam boards to collect statements from centres which confirm that students have been given reasonable opportunities to carry out observational activities.

Our proposed Conditions and guidance

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

Three respondents answered this question. One (an organisation) commented that Ofqual should place more emphasis on the principles of astrophysics, and less on fact recall to make the qualification more rigorous.

Two respondents (both organisations) felt that malpractice issues needed further clarity. One respondent commented that bad weather conditions might not allow observational activities to take place for weeks, or even months at a time; they requested that more information was provided on what happens if it has not been possible for schools to provide students with opportunities to conduct observational activities in these circumstances.

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

One respondent (an organisation) pointed out minor typographical inaccuracies within the document.

Equality Impact Assessment

Question 10: We have not identified any ways (beyond those we have identified in earlier consultations) in which the proposals for GCSE astronomy would impact (positively or negatively) on persons who share a protected characteristic.⁴ Are there any potential impacts we have not identified?

⁴ '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.

Four respondents answered this question. Three respondents (all organisations) answered 'No'. One respondent (an individual) answered 'Yes', commenting that there could be a problem for students of certain religious backgrounds who believe in a creationist view of the universe.

Question 11: Are there any additional steps we could take to mitigate any negative impact resulting from these proposals on persons who share a protected characteristic?

Question 12: Do you have any other comments on the impacts of the proposals on students who share a protected characteristic?

Four respondents (three organisations, one individual) answered questions 11 and 12, answering 'No' for both.

Other issues

As noted above, one respondent (an organisation) did not comment directly on our proposals. Instead they noted that it was important that relevant subject associations were consulted on individual subjects, that qualification reforms needed to take account of the needs of all relevant stakeholders, and that reforms should be phased in gradually over time.

Appendix A: List of organisational consultation respondents

When completing the questionnaire, respondents were asked to indicate whether they were responding as an individual or on behalf of an organisation.

Below we list those organisations that submitted a response to the consultation. We have not included a list of those responding as an individual; however all responses were given equal status in the analysis.

ASCL

Harrow School, Middlesex

National Schools' Observatory

Pearson

Roseland Observatory

Truro High School for Girls, Cornwall

We wish to make our publications widely accessible. Please contact us at publications@ofqual.gov.uk if you have any specific accessibility requirements.



© Crown copyright 2016

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit <http://nationalarchives.gov.uk/doc/open-government-licence/version/3> or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: publications@ofqual.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.uk/ofqual.

Any enquiries regarding this publication should be sent to us at:

Office of Qualifications and Examinations Regulation

Spring Place
Coventry Business Park
Herald Avenue
Coventry CV5 6UB

2nd Floor
Glendinning House
6 Murray Street
Belfast BT1 6DN

Telephone 0300 303 3344
Textphone 0300 303 3345
Helpline 0300 303 3346