GCSE Astronomy Consultation

Name: Clare McLoughlin
Position: Education, Outreach and Diversity Officer
Organisation: Royal Astronomical Society
Address: Burlington House, Piccadilly, W1J 0BQ
E-mail: cm@ras.org.uk
Telephone: 02077343307
Would you like us to treat your response as confidential? No
Is this a personal or an official Response on behalf of your organisation: Official Response
Type of responding organisation type: Other representative group, learned society
Nation: England
How did you find out about this consultation: Newsletter
May we contact you for further information? : Yes

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:
Currently there is only one exam board.

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?
( ) Strongly agree
( ) Agree
( ) Neither agree nor disagree
( ) Disagree
(x) Strongly disagree
Please explain your reasons:
It is difficult to see how any form of practical skills assessment could be carried out in an exam room, therefore point 2.12 cannot be implemented.

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?
( ) Strongly agree
( ) Agree
Unlike other sciences, astronomy is not a laboratory based subject, it is unique as an observational subject, so therefore there is no consistent approach.

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?

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

Please explain your reasons:
We agree that mathematics are important to the study of astronomy, therefore a proportion of the exam should be dedicated to these skills, however we would like to stress that astronomy should not be compared to Biology, Chemistry and Physics.

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?

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

Please explain your reasons:
As long as this is a minimum and the difference between observational skills and observational questions is understood.

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

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

Please explain your reasons:
Astronomy has plenty of scope for these types of questions therefore they should not be “engineered”. Work needs to be done by subject experts to see how this can be interperated in practice.

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?

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

Please explain your reasons:
Experience of real observation including design, data gathering, analysis and evaluation ‘in the cold’ must be part of the qualification.

**Question 8:** Do you have any comments on our proposed Conditions and requirements for GCSE astronomy?
(x) Yes ( ) No
Please provide your comments:
Astronomy is not similar to Biology, Chemistry and Physics and should expect to have a different assessment. The loss of observational work is regrettable but the board should be allowed leeway to design appropriate assessment and exam structure. Also it can be difficult to perform observations due to weather and conditions, therefore Malpractice etc. needs clarifying and moderating.

**Question 9:** Do you have any comments on our proposed guidance for GCSE astronomy?
(x) Yes ( ) No
Please provide your comments:
It is too restrictive. The assessment should allow a more synoptic and less modular approach to the exams and should be able to avoid the theory/practical split of the other GCSE sciences. Although we are pleased to see the increase in content linking the student to the world in which s/he lives, although much of this is closed book. We are also concerned by how Astronomy is being regarded as a form of Physics, Biology and Chemistry. Astronomy is a unique subject as it is predominately observation based as opposed to experimental.

**Question 10:** We have not identified any ways in which the proposals for GCSE astronomy would impact (positively or negatively) on persons who share a protected characteristic. Are there any potential impacts we have not identified?
( ) Yes (x) No
Please provide your comments:
The main impact is to provide a mechanism whereby any visually impaired pupil can take the qualification.

**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?
( ) Yes ( x) No
Please provide more information:

.......................................................... ..........................................................

.......................................................... ..........................................................

.......................................................... ..........................................................

**Question 12:** Do you have any other comments on the impacts of the proposals on students who share a protected characteristic?
( ) Yes (x) No
Please provide more information:

.......................................................... ..........................................................

.......................................................... ..........................................................

.......................................................... ..........................................................

.......................................................... ..........................................................

.......................................................... ..........................................................