# Responding to the *Developing New GCSEs, AS and A Levels for First Teaching in 2017 – Part 1* Consultation

## AS and A level environmental science

Question 27: To what extent do you agree or disagree that AS qualifications in environmental science should be assessed entirely by exams?

( ) Strongly agree

( ) Agree

( ) Neither agree nor disagree

(x ) Disagree

( ) Strongly disagree

Please give reasons for your answer:

The RSB is concerned to see that the practical element of the environmental sciences qualification will not be directly assessed. Biology chemistry and physics A levels have direct assessment of students skills through the practical endorsement, alongside the indirect assessment of practical understanding and skills through exam questions. The lack of direct assessment implies that the “Environmental Sciences” qualification does not put the same value on practical work as other science subjects. It is essential that the practical element is recognised as a vital part of all science qualifications and without direct assessment the practical elements may be devalued.

The proposed 100% written exam assessment would not enable universities to identify those students who were practically skilled in A level Environmental Science, which has clearly been prioritised in the content drafted by DfE. We would encourage the Department of Education to reconsider the assessment of practical work to include direct assessment of practical skills. If the direct assessment cannot be incorporated into the overall exam grade, we would recommend that something similar to the practical endorsement for the Biology, Chemistry and Physics A level is implemented.

Question 28: To what extent do you agree or disagree that A levels in environmental science should be assessed entirely by exams?

( ) Strongly agree

( ) Agree

( ) Neither agree nor disagree

(x ) Disagree

( ) Strongly disagree

Please give reasons for your answer:

The RSB is concerned to see that the practical element of the environmental sciences qualification will not be directly assessed. Biology chemistry and physics A levels have direct assessment of students skills through the practical endorsement, alongside the indirect assessment of practical understanding and skills through exam questions. The lack of direct assessment implies that the “Environmental Sciences” qualification does not put the same value on practical work as other science subjects. It is essential that the practical element is recognised as a vital part of all science qualifications and without direct assessment the practical elements may be devalued.

The proposed 100% written exam assessment would not enable universities to identify those students who were practically skilled in A level Environmental Science, which has clearly been prioritised in the content drafted by DfE. We would encourage the Department of Education to reconsider the assessment of practical work to include direct assessment of practical skills. If the direct assessment cannot be incorporated into the overall exam grade, we would recommend that something similar to the practical endorsement for the Biology, Chemistry and Physics A level is implemented.

Question 29: To what extent do you agree or disagree that the proposed assessment objectives are appropriate for AS and A levels in environmental science?

( ) Strongly agree

( ) Agree

( ) Neither agree nor disagree

( x ) Disagree

( ) Strongly disagree

Please give reasons for your answer:

As a science subject, we would like to see the Environmental Science assessment objectives more closely match the objectives for the A levels in Biology Chemistry and Physics. We think that it would be beneficial for objective AO2 to include reference to the different contexts that the knowledge can be applied, both theoretical and practical which will reinforce the importance of practical work and the need for it to be integrated into teaching. We would also like to see included a reference to the handling of quantitative and qualitative data to highlight the 10% mathematical content. For objective AO3 we think it should also include references to making judgements and reaching conclusions and to develop and refine practical design and procedures as this recognises the practical skills required by students. With these changes we think that this will better align Environmental Sciences with the other science A levels.

Question 30: To what extent do you agree or disagree that the proposed weightings of the assessment objectives are appropriate for AS qualifications in environmental science?

( ) Strongly agree

( ) Agree

( x ) Neither agree nor disagree

( ) Disagree

( ) Strongly disagree

Please give reasons for your answer:

The weightings for the assessment objectives match the weightings for the A levels in Biology Chemistry and Physics, we do not think they need to be amended. We recommend that direct assessment of practical work is included.

Question 31: To what extent do you agree or disagree that the proposed weightings of the assessment objectives are appropriate for A levels in environmental science?

( ) Strongly agree

( ) Agree

( x ) Neither agree nor disagree

( ) Disagree

( ) Strongly disagree

Please give reasons for your answer:

The weightings for the assessment objectives match the weightings for the A levels in Biology Chemistry and Physics, we do not think they need to be amended. We recommend that direct assessment of practical work is included.