

Ofqual: Completing GCSE, AS and A Level Reform

Response by the Wellcome Trust

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Key Points

- The overall intention of Ofqual's proposals to ensure high and comparable standards across all GCSE, AS and A level qualifications is appropriate, and we recognise the need for improved communication and collaboration between the exam boards, through the joint development of core content, to achieve this.
- However, we are disappointed by the lack of detail and clarity throughout the consultation. Further information is required on the proposed process for core content development to ensure that the changes do not have unintended negative consequences for new qualifications. The principles to determine whether a subject should be developed into a new qualification also require greater clarification.
- We have concerns about some of the science subjects proposed for discontinuation but in the absence of further information about the people that choose to study them, we are unable to make an informed comment about the appropriateness of the proposal.

Introduction

1. The Wellcome Trust has a long-standing commitment to making inspirational, high-quality science education available to all young people. This will help nurture the next generation of scientists and ensure that all students have the skills and knowledge they need to live in an increasingly technological age.
2. We are keen to encourage as many young people as possible to continue to study and enjoy science throughout GCSE and A level. To enable this, there should be a wide range of science choices on offer.
3. We believe that greater clarity and further detail are required on a number of consultation points before informed decisions can be made about which qualifications to develop, and how this process should occur.

Consultation questions

Subject content and availability

Development process

4. We fully support the need for better communication and collaboration between the exam boards in order to achieve greater consistency in their approaches to qualifications and assessment. However, it is important that any additional initial investment that may be required to develop core content in partnership does not deter exam boards from reforming worthwhile qualifications.
5. The development of high-quality core content will depend on thorough consultation with a range of stakeholders and we are pleased that Ofqual intends to require this of the exam boards. Ofqual should ensure that this process includes engagement with subject communities, where possible through the subject professional bodies.

6. Under the new proposals, exam boards will be required to work together to develop core content for any new qualifications they wish to offer. This seems to assume that all exam boards will wish to develop new qualifications at the same point in time, which in practice may not always be the case. We seek clarification as to what the process will be if an exam board wishes to introduce a qualification where core content has previously been developed by other exam boards.
7. We would welcome further information on the process and anticipated timelines for core content development by the exam boards and further detail on the ways in which Ofqual will regulate this process.

Principles for subject availability

8. In the past, it has proved difficult to ensure that the standard of qualifications is consistent across all subjects. Assessments comparing the relative difficulty of A level subjects indicate that it is more difficult to obtain a high grade in Biology, Chemistry, Physics, Maths and especially Further Maths, than nearly all other subjects¹. This discrepancy may deter students from continuing to study science at A level. We therefore strongly support Ofqual's aim to ensure that level of demand is comparable across subjects and would welcome further detail on how this will be achieved.
9. We note the recommendation in Ofqual's consultation that non-exam assessment should be proposed when it is the only valid way to assess essential elements of a subject. However, we believe that it should be proposed when it is the *best* way to assess these elements. In the context of science, written exam questions can be used to test whether students know and understand certain experimental and investigative methods, but unlike direct assessment, cannot test many practical and technical skills, such as their ability to work with accuracy and precision.
10. While we agree that qualifications should not contain unnecessary overlap in subject content, we would welcome clarification as to why overlap can make it more difficult to ensure validity and comparability. It is also unclear, in the context of the consultation, what is meant by an 'unusual' subject. If this refers to subjects with low student uptake, the concerns around unusual subjects do not appear to be reflected in the recommendations for future reform or discontinuation. Ancient History A level, for example, has one of the lowest uptake levels (346 UK awards in 2012) but has been proposed for reform.
11. The principles to determine subject availability, outlined in the consultation, do not appear to be reflected in the lists of subjects proposed for discontinuation and reform. We seek clarification as to how the decisions to remove certain subjects at GCSE, AS and A level have been made.

Impact analysis

12. The range of qualifications offered by exam boards should provide all students with the opportunity to study and enjoy science. The consultation contains very little detail as to which groups of students may be affected by changes in subject availability and why. Impacts should be explored further before decisions are made to discontinue existing qualifications.

¹ Coe, R. et al. Relative difficulty of examinations in different subjects: Report for SCORE (2008) <http://www.score-education.org/media/3194/relativedifficulty.pdf>

Qualifications proposed for discontinuation

13. We support a broad and varied science curriculum that accommodates all types of student and opens, rather than closes, doors into future education and career paths. We do not have sufficient information to provide firm recommendations but at this stage we do have concerns about the proposed discontinuation of Applied Science and Environmental Science at GCSE, AS and A level.
14. GCSE Applied Science is aimed at students who wish to take a more vocational, contextualised approach to science. AS and A level Applied Science also take a more contextualised approach to science and enable students to continue to study a broad range of science subjects post-16, rather than specialising in Biology, Chemistry or Physics.
15. Environmental science is an area of increasing relevance and global importance as we confront environmental challenges such as climate change and sustainability. While there are some overlaps between Environmental Science and Biology and Geography qualifications at GCSE, AS and A level, much of the content is distinct.

Additional considerations

16. In order to fully assess the value of the subjects proposed for discontinuation, further information is required about which people study them. Factors such as the combination of other subjects taken by these students, their next steps post-16 or post-18, and some demographic information would be helpful. In addition, it is important to understand the proportion of adults that study these subjects.

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