

UK FORUM FOR COMPUTING EDUCATION (UKFORCE)

Response to the Ofqual GCSE Computer Science consultation on conditions and guidance

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Contact

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3. Responding to the consultation

Would you like us to treat your response as confidential?*

No

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

Official response

Type of responding organisation*

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

Type of representative group or interest group

Other (please state below)

The UK Forum for Computing Education (UKForCE) brings together key stakeholders across the computing and education communities, including employers and employer representatives, teachers, learned societies, higher education representatives, subject associations and other supporters of computing education to provide a single voice on policy matters relating to computing in schools. UKForCE is hosted by the Royal Academy of Engineering.

Nation*

England

Wales

Northern Ireland

Scotland

How did you find out about this consultation?

Other

May we contact you for further information?

Yes

QUESTIONS

Question 1

Do you have any comments on the draft Conditions for new GCSEs in computer science?

Yes No

UKForCE welcomes that Condition GCE4.1 does not apply to GCSE computer science qualifications and that 20% of the Computer Science GCSE will be examined through non-exam assessment as this reflects the practical nature of the subject.

Question 2

Do you have any comments on the draft requirements in relation to assessments which are not Assessments by Examination for new GCSEs in computer science?

Yes No

UKForCE endorses the BCS and CAS response to the consultation and ask that Ofqual take into account the detailed response provided by them.

We welcome that schools will be able to set tasks for the non-exam assessment rather than awarding organisations as we believe this will lead to a wider range of projects that the students could undertake. However, we support BCS and CAS comment that the relative difficulty of solving a problem in different programming languages should be taken into account in the assessment outcomes.

We also welcome the recognition from Ofqual that external marking may be difficult for Computer Science, given the range of projects and programming languages being used, and therefore allowing for internal marking to be undertaken by teachers within schools.

We are uncertain as to whether a single project of 20 hours length is necessarily the best way to undertake non-exam assessment, or why the length of 20 hours has been set, or how this will be measured, unless Ofqual expects the project work to be undertaken under controlled conditions, which is at odds with the consultation notes (para 1.12) which state that Ofqual will not prescribe the conditions under which the assessment is taken. There may also be issues relating to the differing levels/speed of computing-related access experienced in urban vs rural areas, if controlled conditions are necessary.

Rather than requiring a single project conducted over 20 hours, Ofqual might wish to consider an alternative approach of a portfolio of different tasks undertaken by students such as in GCSE Art and Design. While this approach may not lend itself as readily to synoptic assessment, it would enable the demonstration of a wider range of programming languages and different applications of students' computational thinking.

It is also important that awarding organisations give due consideration to the weighting within the non-exam assessment. UKForCE would like to see greater weight attributed to the problem solving,

programming and computational thinking, while the report(s) should be used to provide the necessary supporting evidence of how the task(s) being solved and understanding/ justification of the approaches taken. We would not want to see the project work dominated by lengthy reports as has happened previously in Design and Technology.

Question 3

Do you have any comments on our proposal to require awarding organisations to use statistical moderation to validate marks for the non-exam assessment?

Yes No

UKForCE is uncertain about the validity of statistical moderation to validate marks for non-exam assessment of computer science. In paragraph 1.23 of the consultation, Ofqual states that statistical moderation works best when there are large numbers of students demonstrating a range of levels. UKForCE disagrees with Ofqual's assertion in paragraph 1.24 that there will be large numbers of students taking the qualification, as given the limited supply of specialist teachers across the UK it is likely that few schools will opt to take the subject at GCSE and those that do are likely to encourage only the most able students. UKForCE is also concerned that Ofqual is basing the use of statistical moderation for Computer Science GCSEs in the UK on examples of it being used in other international jurisdictions where it is used to 'monitor' performance (along with other forms of moderation) rather than to 'calibrate' it.

We also have concerns that with new linear assessment in place, some students may struggle with terminal examinations despite being able to demonstrate high levels of computational problem solving and programming skills through a project. We need qualifications at GCSE level to start preparing young people for the realities of the workplace, and it is important that those who are able to deliver in terms of project outcomes receive the appropriate recognition.

Question 4

Do you have any views on which of the possible approaches to statistical moderation would be most appropriate for GCSEs in computer science?

Yes No

It is very difficult to be able to provide a view on the possible approaches to statistical moderation based on the limited detail provided within the consultation notes. However, if Ofqual intends to proceed with statistical moderation despite the concerns expressed by UKForCE, BCS and CAS, then the statistical moderation approach, rather than the linear scaling approach, will at least enable longer-term monitoring of school marking.

Question 5

Do you have any comments on the draft Guidance on assessment objectives for new GCSEs in computer science?

Yes No

UKForCE is content with the assessment objectives and welcomes that the 'application' of knowledge and understanding of key concepts and principles of computer science is given a 10% higher weighting within the assessment objectives.

Question 6

We have not identified any ways in which the proposed requirements for new GCSEs in computer science would impact (positively or negatively) on persons who share a protected characteristic. Are there any potential impacts we have not identified?

Yes No

Question 7

Are there any additional steps we could take to mitigate any negative impact resulting from these proposals on persons who share a protected characteristic? If so, please comment on the additional steps we could take to mitigate negative impacts.

Yes No

Question 8

Have you any other comments on the impacts of the proposals on persons who share a protected characteristic?

Yes No