GCSE Computer Science

Consultation on Conditions and Guidance

February 2015

Ofqual/15/5620

Contents

About this consultation

We are seeking views on the regulatory requirements we propose to put in place for new GCSEs in computer science. These new qualifications are due to be taught in England from September 2016.

We do not repeat the policy proposals for this qualification on which we consulted during 2014 or the options we considered when we did so. You can find the outcome of that consultation on our website,[1] along with a summary of the responses to the consultations and our equality and regulatory impact assessments.

Further information about the reform of GCSE/A level/AS can be found at www.gov.uk/government/publications/get-the-facts-gcse-and-a-level-reform.

Summary of our proposals – GCSE computer science

- New GCSEs in computer science must comply with the Department for Education's subject content requirements, and with our assessment objectives.
- In line with our previous decisions, and with current qualifications, new GCSEs in computer science will be untiered.
- For consistency and comparability, 20 per cent of the marks for all new GCSEs in computer science will be allocated to non-exam assessments, which will test programming skills.
- Students' work will be marked by teachers. Awarding organisations will use statistical moderation to promote reliable and accurate marking.
- The remaining 80 per cent of the marks will be allocated to examinations, set and marked by the awarding organisations.

[1] www.gov.uk/government/consultations/gcses-as-and-a-levels-reform-of-subjects-for-september-2016

How to respond to this consultation

The closing date for responses to this consultation is **16th March 2015**.

Please respond to this consultation in one of three ways:

- complete the online response at: http://surveys.ofqual.gov.uk/s3/gcse-computer-science-conditions-and-guidance; or
- email your response to consultations@ofqual.gov.uk
  Please include the consultation title (GCSE Computer Science Technical Consultation) in the subject line of the email and make clear who you are and in what capacity you are responding;
- post your response to: GCSE Computer Science Technical Consultation 2015, Ofqual, Spring Place, Herald Avenue, Coventry, CV5 6UB.

Evaluating the responses

To evaluate responses properly, we need to know who is responding to the consultation and in what capacity. We will therefore only consider your response if you complete the information page.

Any personal data (such as your name, address and any other identifying information) will be processed in accordance with the Data Protection Act 1998 and our standard terms and conditions.

We will publish the evaluation of responses. Please note that we may publish all or part of your response unless you tell us (in your answer to the confidentiality question) that you want us to treat your response as confidential. If you tell us you wish your response to be treated as confidential, we will not include your details in any published list of respondents, although we may quote from your response anonymously.

Please respond by 16th March 2015.

Conditions of Recognition

Awarding organisations must comply at all times with our Conditions of Recognition. These are the main regulatory rules that we use. We can take regulatory action against an awarding organisation that breaches or is likely to breach a Condition.

There are three sets of Conditions that will apply to new GCSEs (together 'the Conditions'):

(i) the published *General Conditions of Recognition*[2] that apply to all regulated qualifications;

(ii) the published *GCSE (9 to 1) Qualification Level Conditions and Requirements*[3] that apply to all GCSEs (9 to 1);

(iii) GCSE Subject Level Conditions that apply to a GCSE (9 to 1) in a specific subject.

We are now consulting on draft GCSE Subject Level Conditions for computer science.

The way the Conditions of Recognition work alongside our other regulatory tools is set out in Appendix A.

[2] www.gov.uk/government/publications/general-conditions-of-recognition

[3] www.gov.uk/government/publications/gcse-9-to-1-qualification-level-conditions

1. Draft GCSE Subject Level Conditions and Guidance for computer science

Content requirements in computer science

1.1 The Department for Education has published a document that sets out the new content for GCSE computer science. New GCSEs in computer science must comply with the requirements of that document,[4] and with our assessment objectives.

1.2 To bring this about, we propose to introduce the following Condition:

Condition GCSE(Computer Science)1	**Compliance with content requirements**
GCSE(Computer Science)1.1	**In respect of each GCSE Qualification in Computer Science which it makes available, or proposes to make available, an awarding organisation must –** **(a) comply with the requirements relating to that qualification set out in the document published by the Secretary of State entitled 'Computer Science GCSE subject content',[5] document reference DFE-00701-2014,** **(b) have regard to any recommendations or guidelines relating to that qualification set out in that document, and** **(c) interpret that document in accordance with any requirements, and having regard to any guidance, which may be published by Ofqual and revised from time to time.**
GCSE(Computer Science)1.2	**In respect of each GCSE Qualification in Computer Science which it makes available, or proposes to make available, an awarding organisation must comply with any requirements, and have regard to any guidance, relating to the objectives to be met by any assessment for that qualification which may be published by Ofqual and revised from time to time.**

[4] www.gov.uk/government/publications/gcse-computer-science

[5] www.gov.uk/government/publications/gcse-computer-science

Assessment arrangements and requirements

1.3 GCSEs in computer science are to be assessed through a mixture of assessment by examination and non-exam assessment. We have already consulted on and announced our decision[6] in relation to the percentage of GCSE computer science that should be assessed through non-exam assessment (20 per cent).

1.4 To bring this about, we propose to introduce the following Condition:

Condition GCSE(Computer Science)2	**Assessment**
GCSE(Computer Science)2.1	**Condition GCE4.1 does not apply to any GCSE Qualification in Computer Science which an awarding organisation makes available or proposes to make available.**
GCSE(Computer Science)2.2	**In respect of the total marks available for a GCSE Qualification in Computer Science which it makes available, an awarding organisation must ensure that –** **(a) 80 per cent of those marks are made available through Assessments by Examination, and** **(b) 20 per cent of those marks are made available through assessments that are not Assessments by Examination.**
GCSE(Computer Science)2.3	**An awarding organisation must ensure that in respect of each assessment for a GCSE Qualification in Computer Science which it makes available which is not an Assessment by Examination it complies with any requirements, and has regard to any guidance, which may be published by Ofqual and revised from time to time.**

[6] www.gov.uk/government/consultations/gcses-as-and-a-levels-reform-of-subjects-for-september-2016

1.5 Condition GCSE(Computer Science)2.3 allows us to specify requirements in relation to assessments which are not Assessments by Examination for GCSE qualifications in computer science.

1.6 In June 2013, we published the outcome of our *Review of Controlled Assessment in GCSEs.*[7] In that document, we set out the principles we would use for reformed GCSE qualifications to determine where we should use alternative assessment for elements that cannot be assessed by written exams. Of particular relevance to this consultation are the following:

- Non-exam assessment arrangements, including the weighting assigned to any non-exam assessment, should be designed to fit the requirements of the subject.
- Controls should be used to ensure that we can be confident that what is assessed is what was intended to be assessed.
- Where non-exam assessment contributes to the overall grade, we will require exam boards to put in place robust arrangements to make sure the marks are valid and reliable.
- Non-exam assessment should be designed so that external pressures do not easily distort the qualification.

1.7 For each subject where there is non-exam assessment, we have considered carefully the controls we can put in place to ensure that non-exam assessment is valid and reliable. Our starting point is that we should put in place appropriate controls to secure the reliability and validity of the assessment. Those controls might concern the setting, conduct and/or marking of the non-exam assessment.

1.8 We are proposing to put in place requirements which relate to the design and setting of the non-exam assessment for GCSE computer science as follows:

- it should comprise a single project generating:
  - a program designed, written, tested and refined by the student either to a specification, or to solve a problem; and
  - a written report;

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7 http://webarchive.nationalarchives.gov.uk/20141110161323/http://ofqual.gov.uk/ofdoc_categories/regulations-and-guidance/gcses-a-to-g/gcse-controlled-assessment-regulations-gcses-a-to-g/

- it is taken under conditions specified by the awarding organisation;
- it should be designed to be completed by students during a period of 20 hours.

1.9 We considered whether to specify that the non-exam assessment tasks should be set by awarding organisations. While this would provide additional controls, our view is that it would unduly constrain students' choice of project, and could undermine the curriculum intention to encourage students to solve real-world problems. We therefore propose that the tasks could be set by schools.

1.10 We also considered whether to specify how the non-exam assessment should be conducted, and particularly whether we could limit opportunities for malpractice such as accessing websites containing solutions, or work stored online that was completed outside of the classroom.

1.11 Our view is that any such restrictions would be impractical. Given the nature of the subject, students are likely to require access to the internet to complete the non-exam assessment task. IT systems in schools are unlikely to be sophisticated enough to block access to all external solutions, and in any event students will be able to think about and develop their ideas for their projects outside the controlled conditions.

1.12 We therefore propose that awarding organisations should put in place appropriate processes to ensure work is the student's own, but that we should not prescribe the conditions under which the assessment is taken.

1.13 Since we can only implement limited controls around the setting and conduct of the non-exam assessment in GCSE computer science, we have paid particular attention to the controls around marking of the non-exam assessment. The marking will be based on the products of the project; there will be no direct assessment of how a student creates their products.

1.14 Non-exam assessment can be marked either by the awarding organisation (external marking), or by teachers within their own schools (internal marking). External marking is usually more reliable than internal marking; it uses a smaller number of markers making it easier for awarding organisations to ensure marking is consistent.

1.15 In the case of GCSE computer science, the wide range of possible projects that students could undertake – and the different programming languages they can use – creates significant logistical challenges for external marking which make it difficult for awarding organisations to manage. Our view is that requiring external marking would most likely mean awarding organisations allow the use

of fewer programming languages, which would conflict with the curriculum intentions.

1.16 Because of the manageability issues associated with external marking in GCSE computer science, we are proposing to allow internal marking.

1.17 We need to be conscious, however, of external pressures on the qualification. GCSE computer science is one of the most important subjects in the Department for Education's 'Progress 8' measure for secondary school accountability[8] (it sits alongside sciences, geography, history and languages within the EBacc). This is a change from current arrangements, and is likely to mean schools come under significant pressure to deliver optimal results in GCSE computer science.

1.18 Whenever internal marking is used, awarding organisations must comply with General Condition H2 (*Moderation where an assessment is marked by a Centre*), which requires awarding organisations to carry out moderation.

1.19 The importance of the subject for secondary school accountability means we should take particular care to ensure that marks are justifiable. We are therefore proposing to introduce additional controls around the moderation of internal marking of this subject. In particular, we are considering requiring awarding organisations to use statistical moderation.

Statistical moderation

1.20 Statistical moderation uses students' exam marks to inform an adjustment, where necessary, of their marks for their non-exam assessment. It aims to match up performances from different sources or in different areas within a subject by statistically adjusting scores in an attempt to make them comparable. It can be used to calibrate or to monitor marks.

1.21 There are different ways to calibrate non-exam assessment marks using statistical moderation. Linear scaling involves aligning the average and the spread of non-exam assessment marks of all the students in a given school with those of the exam scores for the same students. During the moderation process, a teacher's marks may be adjusted, but the rank order determined by

[8] www.gov.uk/government/consultations/secondary-school-accountability-consultation

the school will remain unchanged. Generally speaking, the moderated marks will become the final marks of individual students in that school.[9]

1.22 Using statistical moderation to monitor marks is a broader approach, where statistical comparisons are used to detect comparability issues by, for example, triggering moderation by inspection. It may also be used for longer-term monitoring of schools' marking.

1.23 Statistical moderation is used in some countries, typically in conjunction with other forms of moderation, and generally to monitor performance rather than to calibrate it. Statistical moderation works best when there are large numbers of students in a school demonstrating abilities at a range of levels, and where there is a strong relationship between the assessment focus in the exams and the focus in the non-exam assessment.

1.24 We think there is a compelling case for using statistical moderation in GCSE computer science. Its importance within secondary school accountability measures means there will be large numbers of students taking the qualification. Programming skills can demonstrated at a range of levels, and the nature of the non-exam assessment (a single project drawing together students' knowledge, skills and understanding from the full course of study) means we would typically expect a close relationship between a student's attainment in the exams and in the non-exam assessment.

1.25 We have included in our draft conditions a high-level obligation that requires awarding organisations to use students' exam results as part of moderation. We will develop and consult on more detailed requirements around the use of statistical moderation in light of feedback to that proposal.

[9] See, for example, www.hkeaa.edu.hk/DocLibrary/Media/Leaflets/HKDSE-SBA-ModerationBooklet_r.pdf and

www.vcaa.vic.edu.au/Pages/vce/exams/statisticalmoderation/statmod.aspx.

Requirements in relation to assessments for GCSE Qualifications in Computer Science

Condition GCSE(Computer Science)2.3 allows us to specify requirements and guidance in relation to assessments which are not Assessments by Examination for GCSE Qualifications in Computer Science.

We set out our requirements for the purposes of Condition GCSE(Computer Science)2.3 below.

Non-examination assessment

Condition GCSE(Computer Science)2.2(b) states that an awarding organisation must ensure that, of the total marks available for a GCSE Qualification in Computer Science, 20 per cent of those marks shall be made available through assessments set by the awarding organisation which are not Assessments by Examination.

An awarding organisation must ensure that each assessment which is not an Assessment by Examination −

(a) is designed and set on the basis that it should be completed by each Learner during periods of assessment totalling 20 hours,
(b) is designed and set to be taken under conditions specified by the awarding organisation, including, in particular, conditions which ensure that the evidence generated by each Learner can be Authenticated, and
(c) requires each Learner to undertake a single project which leads to the generation of the following evidence –
    (i) a program designed, written, tested and refined by the Learner, either to a specification or to solve a problem, using one or more high-level programming languages specified by the awarding organisation, accompanied by a textual program definition, and
    (ii) a written report.

An awarding organisation must ensure that in its specification for a GCSE Qualification in Computer Science which it makes available, or proposes to make available, it specifies the high-level programming language(s) which Learners are permitted to use for their programs. An awarding organisation must justify its selection of permitted high-level programming languages in its assessment strategy for the qualification.

Marking of assessments

Evidence generated by a Learner in an assessment for a GCSE Qualification in Computer Science which is not an Assessment by Examination may be marked –

(a) by the awarding organisation or a person connected to the awarding

organisation,

(b) by a Centre, or

(c) through a combination of (a) and (b).

In any event, the awarding organisation must –

(a) demonstrate to Ofqual's satisfaction in its assessment strategy that it has –
  (i) taken all reasonable steps to identify the risk of any Adverse Effect which may result from its approach to marking assessments which are not an Assessment by Examination (and to Moderation where appropriate), and
  (ii) where such a risk is identified, it has taken all reasonable steps to prevent that Adverse Effect or, where it cannot be prevented, to mitigate that Adverse Effect,

(b) ensure that in its Moderation of assessments marked by a Centre it has regard to the levels of attainment demonstrated in the Assessments by Examination taken by the Learners whose marks are the subject of that Moderation.

Assessment objectives

1.26 We have previously consulted on and announced our decisions on assessment objectives in new GCSEs in computer science. These final assessment objectives are repeated below for completeness.

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of the key concepts and principles of computer science.	30%
AO2	Apply knowledge and understanding of key concepts and principles of computer science.	40%
AO3	Analyse problems in computational terms: ■ to make reasoned judgements; and ■ to design, program, evaluate and refine solutions.	30%

Guidance on assessment objectives

1.27 The draft guidance on assessment objectives explains how we expect awarding organisations to interpret the assessment objectives in terms of:

- the different 'strands' within each of the assessment objectives;
- the discrete 'elements' within each assessment objective and its strands, that questions and tasks could target and/or seek to credit;
- the coverage expectations, such as in relation to the different elements within each assessment objective and how those elements should be sampled over time; and
- the key areas of emphasis in each assessment objective and the particular meaning for the subject of any key terms and phrases used; defined terms are shown in bold text, followed by their definitions.

1.28 In line with the obligations set out in draft Condition GCSE(Computer Science)1.2, awarding organisations must have regard to any guidance on the assessment objectives. For example, an awarding organisation could map how it has regard to the guidance as it:

- develops its sample assessment materials;
- delivers the qualification;
- develops and applies its approach to sampling the elements into which the assessment objectives are divided; and
- monitors the qualification to make sure it addresses all elements appropriately.

1.29 The draft guidance on assessment objectives is set out below.

AO1: Demonstrate knowledge and understanding of the key concepts and principles of computer science			30%
Strands	**Elements**	**Coverage**	**Interpretations and definitions**
n/a	1a – Demonstrate knowledge of the key concepts and principles of computer science. 1b – Demonstrate understanding of the key concepts and principles of computer science.	■ Full coverage in each set of assessments[10] (but not in every assessment). ■ No more than 10% of the total marks for the qualification should reward demonstrating knowledge in isolation.	■ In the context of this assessment objective, **demonstrate** means showing knowledge and understanding – for example by stating or explaining a fact, concept or principle. ■ Both here and in AO2, **key concepts and principles of computer science** means the knowledge and understanding specified in the subject content document, published by the Department for Education.[11]

[10] For the purposes of this guidance, a 'set of assessments' means the assessments to be taken by a particular Learner for a GCSE Qualification in Computer Science. For clarity, the assessments taken by Learners may vary, depending on any possible routes through the qualification.

[11] www.gov.uk/government/publications/gcse-computer-science

AO2: Apply knowledge and understanding of key concepts and principles of computer science			40%
Strands	**Elements**	**Coverage**	**Interpretations and definitions**
n/a	1a – Apply knowledge of key concepts and principles of computer science.	■ Full coverage in each set of assessments (but not in every assessment).	■ In the context of this assessment objective, **apply** means using knowledge and understanding in a particular context or contexts. It includes both practical and theoretical contexts, and the use of computing-related mathematics within those contexts.
	1b – Apply understanding of key concepts and principles of computer science.		

<table>
<tr><th colspan="3">AO3: Analyse problems in computational terms:
■ to make reasoned judgements
■ to design, program, evaluate and refine solutions</th><th>30%</th></tr>
<tr><th>Strands</th><th>Elements</th><th>Coverage</th><th>Interpretations and definitions</th></tr>
<tr><td>1 – to make reasoned judgements</td><td>This strand is a single element.</td><td rowspan="4">■ Full coverage in each set of assessments (but not in every assessment).</td><td rowspan="4">■ Analyse should involve deconstructing an issue so as to consider its component parts in terms that can be addressed through automated computation. It includes, but is not limited to, requirements analysis and the building of abstract models of real-world objects or phenomena.
■ Problems should be defined broadly to encompass tasks, goals or objectives.
■ Reasoned judgements means judgements based on a logical chain of thinking, which could link with applying knowledge and understanding.
■ Questions/tasks for elements 2a and/or 2b may use pseudo-code (or other suitable methods to represent algorithms) as well as the high-level computing languages detailed within an awarding organisation’s specification:
□ where pseudo-code is used as an intermediate stage it would be within element 2a;
□ where pseudo-code is the final result it would be within element 2b.
■ Some of the activities within ‘testing’ (for example constructing test data and carrying out test protocols)</td></tr>
<tr><td rowspan="3">2 – to design, program, evaluate and refine solutions</td><td>2a – Design solutions.</td></tr>
<tr><td>2b – Program solutions.</td></tr>
<tr><td>2c – Evaluate and refine solutions.</td></tr>
</table>

AO3: Analyse problems in computational terms: ■ **to make reasoned judgements** ■ **to design, program, evaluate and refine solutions**			**30%**
Strands	**Elements**	**Coverage**	**Interpretations and definitions**
			should be tested under this assessment objective, but others would fall under other assessment objectives as outlined below: □ describing test strategies would be within AO1 strand 1b; □ suggesting an appropriate test strategy to a given scenario would fall under AO1 or AO2, as appropriate to the question/task. ■ Evaluating and refining solutions can be targeted in relation to: □ Learners' own or given solutions; □ designing and programing solutions; ■ other areas such as AO3 strand 1.

2. Equality impact analysis

Ofqual's role, objectives and duties

2.1 We are subject to the public sector equality duty. We have set out in Appendix B how this duty interacts with our statutory objectives and other duties.

Equality impact analysis relating to proposed changes to GCSEs

2.2 We have considered the potential impact on students who share protected characteristics[12] of the application of the principles and features that will apply to all new GCSEs. Our equality impact analyses for our earlier consultation on GCSE reform[13] is therefore of interest and we encourage you to read it.

2.3 We have also previously considered the potential impact on students who share protected characteristics of the policy proposals we are implementing for GCSE computer science.[14]

2.4 We do not repeat here all of the evidence we have considered, as this can be found in our earlier reports. We focus instead on the specific issues raised by our proposed assessment arrangements for GCSE computer science.

2.5 During this consultation, we will continue to seek and consider evidence and feedback to our proposals that might help us identify any potential subject-specific impacts on students who share a protected characteristic.

2.6 Awarding organisations are required to consider the accessibility of their qualifications at the design stage and to remove any unjustifiable barriers.

Assessment arrangements

2.7 We have not identified any additional negative impacts on students who share protected characteristics which would result from our proposed assessment arrangements in GCSE computer science.

[12] For the purposes of the public sector equality duty, the protected characteristics are disability, racial group, age, religion or belief, pregnancy or maternity, sex, sexual orientation, gender reassignment.

[13] http://webarchive.nationalarchives.gov.uk/20141110161323/http:/comment.ofqual.gov.uk/gcse-reform-june-2013/category/8-equality-impact-analysis/

[14] http://webarchive.nationalarchives.gov.uk/20141110161323/http://comment.ofqual.gov.uk/developing-new-qualifications-for-2016/4-equality-impact-analysis/assessment-arrangements/

2.8 Any issues concerning the proposed content have been considered by the Department for Education, who have published their own Equalities Impact Analysis on their subject content proposals.[15]

[15] www.gov.uk/government/publications/a-level-subject-content-equality-impact-assessment

3. Responding to the consultation

Your details

To evaluate responses properly, we need to know who is responding to the consultation and in what capacity. We will therefore only consider your response if you complete the following information section.

We will publish our evaluation of responses. Please note that we may publish all or part of your response unless you tell us (in your answer to the confidentiality question) that you want us to treat your response as confidential. If you tell us you wish your response to be treated as confidential, we will not include your details in any published list of respondents, although we may quote from your response anonymously.

Please answer all questions marked with a star*

Name*

Position*

Organisation name (if applicable)*

Address

Email

Telephone

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

If you answer yes, we will not include your details in any list of people or organisations that responded to the consultation.

( ) Yes ( ) No

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

( ) Personal response (Please answer the question "If you ticked 'Personal response'…")

( ) Official response (Please answer the question "If you ticked 'Official response'…")

If you ticked 'Personal response' which of the following are you?

( ) Student

( ) Parent or carer

( ) Teacher (but responding in a personal capacity)

( ) Other, including general public (Please state below)

_____

If you ticked 'Official response', please respond accordingly:

Type of responding organisation*

( ) Awarding organisation

( ) Local authority

( ) School or college (please answer the question below)

( ) Academy chain

( ) Private training provider

( ) University or other higher education institution

( ) Employer

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

School or college type

( ) Comprehensive or non-selective academy

( ) State selective or selective academy

( ) Independent

( ) Special school

( ) Further education college

( ) Sixth form college

( ) Other (please state below)

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Type of representative group or interest group

( ) Group of awarding organisations

( ) Union

( ) Employer or business representative group

( ) Subject association or learned society

( ) Equality organisation or group

( ) School, college or teacher representative group

( ) Other (please state below)

_____

Nation*

( ) England

( ) Wales

( ) Northern Ireland

( ) Scotland

( ) Other EU country: _____

( ) Non-EU country: _____

How did you find out about this consultation?

( ) Our newsletter or another one of our communications

( ) Our website

( ) Internet search

( ) Other

_____

May we contact you for further information?

( ) Yes ( ) No

Questions

Question 1

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

( ) Yes ( ) No

If yes, please provide them here:

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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

If yes, please provide them here:

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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

If yes, please provide them here:

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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

If yes, please provide them here:

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Question 5

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

( ) Yes ( ) No

If yes, please provide them here:

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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

If yes, please provide them here:

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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

If yes, please provide them here:

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Question 8

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

( ) Yes ( ) No

If yes, please provide them here:

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Appendix A: Regulatory tools

Comparability and innovation

Awarding organisations operate in a market. They can design and deliver their qualifications in different ways, within the parameters we set. This provides some choice to schools or colleges, which is one of the benefits of a qualifications market. Awarding organisations must, however, make sure that the levels of attainment indicated by their qualifications are comparable to those of other awarding organisations' versions of the qualifications. The awarding organisations cooperate in a range of ways to make sure that the standards of their respective qualifications are comparable. To make sure standards are maintained and comparability is secured, we review GCSEs before they can be made available, by applying an accreditation requirement to the qualifications, and we oversee the awarding of GCSEs.

We do not wish to close down opportunities for awarding organisations to design and deliver their qualifications in different ways. Indeed, we have a statutory duty to have regard to the desirability of facilitating innovation in connection with the provision of regulated qualifications and a statutory objective with regard to the efficiency with which the qualifications market works. If we adopt a regulatory approach in which all aspects of a qualification are very tightly defined, we could effectively remove scope for awarding organisations to distinguish their qualifications from others and stop choice for schools or colleges. On the other hand, if awarding organisations have too much scope to vary their approach their qualifications might not be comparable.

In striking a balance, we use a range of tools to regulate qualifications and the awarding organisations that provide them. The main regulatory tools we use for the qualifications in this consultation are explained below.

Conditions of Recognition

Awarding organisations must comply at all times with our Conditions of Recognition. These are the main regulatory rules that we use. We can take regulatory action against an awarding organisation that breaches or is likely to breach a Condition.

There are three sets of Conditions that will apply to new GCSEs (together 'the Conditions'):

(i) the published *General Conditions of Recognition*[16] that apply to all regulated qualifications;

[16] www.gov.uk/government/publications/general-conditions-of-recognition

(ii) *GCSE (1 to 9) Qualification Level Conditions and Requirements*[17] that apply to all new GCSEs;

(iii) GCSE Subject Level Conditions that apply to a new GCSE in a specific subject – we are consulting now on draft GCSE Subject Level Conditions for computer science.

Regulatory documents

In some Conditions we refer to published regulatory requirements. We publish these in regulatory documents. The Conditions require awarding organisations to comply with such documents.

We are proposing to introduce regulatory documents for GCSEs in computer science covering the assessment requirements for the subject. The requirements will have effect as if they were part of a Condition. The requirements are in a stand-alone section of the Conditions document, simply because they are technical and detailed so they sit better as separate to, rather than within, the Condition itself.

Statutory guidance

We publish Guidance to help awarding organisations identify the types of behaviour or practices they could use to meet a Condition. Awarding organisations must have regard to such guidance, but they do not have to follow this Guidance in the same way that they must comply with the Conditions; they are free to meet the outcomes of the Conditions in their own ways. An awarding organisation that decides to take a different approach to that set out in Guidance must still be able to show that it is meeting the Condition or Conditions to which the Guidance relates.

We are consulting now on draft Guidance for computer science.

[17] www.gov.uk/government/publications/gcse-9-to-1-qualification-level-conditions

Appendix B: Ofqual's role, objectives and duties

Our statutory objectives include the qualifications standards objective, which is to secure that the qualifications we regulate:

(a) give a reliable indication of knowledge, skills and understanding; and

(b) indicate:

  (i) a consistent level of attainment (including over time) between comparable regulated qualifications; and

  (ii) a consistent level of attainment (but not over time) between qualifications we regulate and comparable qualifications (including those awarded outside of the UK) that we do not regulate.

We must therefore regulate so that qualifications properly differentiate between students who have demonstrated that they have the knowledge, skills and understanding required to attain the qualification and those who have not.

We also have a duty under the Apprenticeship, Skills, Children and Learning Act 2009 to have regard to the reasonable requirements of relevant students, including those with special educational needs and disabilities, of employers and of the higher education sector, and to aspects of government policy when so directed by the Secretary of State.

As a public body, we are subject to the public sector equality duty.[18] This duty requires us to have due regard to the need to:

(a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Equality Act 2010;

(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;

(c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The exam boards that design, deliver and award GCSE, A level and AS qualifications are required by the Equality Act, among other things, to make reasonable adjustments for disabled people taking their qualifications, except where we have specified that such adjustments should not be made.

[18] Equality Act 2010, section 149.

When we decide whether such adjustments should not be made, we must have regard to:

(a) the need to minimise the extent to which disabled persons are disadvantaged in attaining the qualification because of their disabilities;

(b) the need to secure that the qualification gives a reliable indication of the knowledge, skills and understanding of a person upon whom it is conferred;

(c) the need to maintain public confidence in the qualification.

Legislation therefore sets out a framework within which we must operate. We are subject to a number of duties and we must aim to achieve a number of objectives. These different duties and objectives can, from time to time, conflict with each other. For example, if we regulate to secure that a qualification gives a reliable indication of a student's knowledge, skills and understanding, a student who has not been able to demonstrate the required knowledge, skills and/or understanding will not be awarded the qualification. A person may find it more difficult, or impossible, to demonstrate the required knowledge, skills and/or understanding because they have a protected characteristic. This could put them at a disadvantage relative to others who have been awarded the qualification. It is not always possible for us to regulate so that we can both secure that qualifications give a reliable indication of knowledge, skills and understanding and advance equality between people who share a protected characteristic and those who do not. We must review all the available evidence and actively consider all the available options before coming to a final, rational decision.

Qualifications cannot be used to mitigate inequalities or unfairness in the education system or in society more widely than might affect, for example, students' preparedness to take the qualification and the assessments within it. While a wide range of factors can have an impact on a student's ability to achieve a particular mark in an assessment, our influence is limited to the way the qualification is designed and assessed.

We require the exam boards to design qualifications to give a reliable indication of the knowledge, skills and understanding of those on whom they are conferred. We also require the exam boards to avoid, where possible, features of a qualification that could, without justification, make a qualification more difficult for a student to achieve because they have a particular protected characteristic. We require exam boards to monitor whether any features of their qualifications have this effect.

In setting the overall framework within which exam boards will design, assess and award the reformed GCSE, A level and AS qualifications, we want to understand the possible impacts of the proposals on persons who share a protected characteristic.

The protected characteristics under the Equality Act 2010 are:

- age;
- disability;
- gender reassignment;
- marriage and civil partnerships;
- pregnancy and maternity;
- race;
- religion or belief;
- sex;
- sexual orientation.

It should be noted that with respect to the public sector equality duty under section 149 of the 2010 Act, we are not required to have due regard to impacts on those who are married or in a civil partnership.

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