

Completing GCSE, AS and A Level Reform



June 2014

Ofqual/14/5466

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Foreword

This consultation is about what needs to be settled so that the reform of GCSE, AS and A level qualifications in England can be completed. The reforms are well under way, with the first specifications expected in schools and colleges in the autumn. We wish to consolidate and complete the reforms within a reasonable time, to settle key qualifications and so people know what to expect and when.

The main issue we are consulting on is how subject content should be developed in the remaining subjects. As qualifications in each subject are reformed, the subject content is reviewed and updated, with an expectation that new GCSEs will have more demanding content. In many subjects,¹ the content has been agreed and published by Government or is being agreed through work led by exam boards and, for some AS and A level qualifications, the A Level Content Advisory Board.² The Government and the A Level Content Advisory Board do not intend to take a role in reforming the remaining subjects, but it is nevertheless important to make sure the content of these subjects remains fit for purpose and up to date. We are proposing that exam boards take the lead, but do not work alone – we will require them to consult others and we will accept revised content only if it is of the right standard.

There are other things to be settled as well. As things change, we want qualifications in different subjects to be similar in their level of demand and assessment structure at each level. Our proposals for this will inevitably lead to a small drop in the number of subjects available: subjects that attract few students may disappear, with exam boards unlikely to invest in reforming them to the standard we require. We also propose a cut-off date for subjects that overlap a lot, or appear to be subsets of more established subjects, unless or until a good case can be made to keep and reform them.

Lastly, we are suggesting a cut-off date for all GCSE, AS and A level qualification reform. We know that staggered reform can be unpopular, although all subjects cannot be reformed at once, and we want better qualifications delivered within a reasonable time – qualifications that are more likely to produce really good educational outcomes for our young people.

¹ These subjects account for an estimated 86 per cent of the awards made at GCSE and 78 per cent of the awards made at A level.

² The A Level Content Advisory Board is an advisory group made up of higher education representatives from the Russell Group of universities.

We know that these proposals will be of great interest to you. Please do give us your views on the options and proposals set out here. We look forward to hearing from you.

A handwritten signature in black ink, appearing to read 'G Stacey', with a long horizontal flourish extending to the right.

Glenys Stacey

Chief Regulator

1. Purpose of the consultation

- 1.1. On our website³ you can find our previous reform consultations, a summary of the responses we received and our equality and regulatory impact assessments, together with our decisions. This consultation does not repeat or revisit any of those proposals.
- 1.2. Rather, it deals with issues yet to be decided. We propose, first of all, that all subjects should be reformed and their content reviewed to make them all of a similar enough standard, and we suggest how this could be done. We then go on to explain the impact our proposals might have, and to suggest how we best ensure the quality of the remaining available subjects, before proposing an end date for reform.

How to respond

The closing date for responses to the consultation is Wednesday 30th July 2014.

Please respond to this consultation in one of three ways:

- Complete the online response at <http://surveys.ofqual.gov.uk/s3/completing-gcse-as-and-a-level-reform-june-2014>
- Email your response to consultations@ofqual.gov.uk – please include Completing GCSE, AS and A Level Reform 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: Completing GCSE, AS and A Level Reform Consultation, Ofqual, Spring Place, Coventry Business Park, Herald Avenue, Coventry, CV5 6UB.

2. Background

- 2.1. When compared with many other countries, England has an exceptional range of GCSE, AS and A level subjects that students can study. The number of entries for each subject ranges from 100 (GCSE in manufacturing) to 942,400 (GCSE in mathematics) (summer 2013, rounded to the nearest hundred). The range has evolved over time in response to various policy initiatives and because exam boards have been generally free to introduce new subjects.

³ <http://comment.ofqual.gov.uk/blog/closed-consultations>

- 2.2. The assessment, content and performance standards of a qualification are related: together they determine its overall demand. We set out how they relate to each other in more detail in appendix A. For qualifications such as GCSEs to remain comparable with each other, the assessments must be similar enough, whatever the subject. We have made significant changes to the assessment requirements of those subjects already being reformed to improve validity and comparability, and we intend to apply the same principle-based approach to all subjects.
- 2.3. Individual subjects should also be similar in overall demand. The Secretary of State has decided that GCSE subject content should be more demanding than now, and the subject review arrangements so far have ensured that. We have this in mind for all other subjects at GCSE. Of course, subject content should also be kept sufficiently up to date in AS and A levels, so the qualifications remain fit for purpose. For these reasons, we think subject content should be reviewed as the structure and assessment in each subject is reformed.
- 2.4. We are not responsible for curriculum or subject content. Since the Qualifications and Curriculum Development Agency closed, there is no one body responsible for this. Instead, content for the reformed qualifications has been developed through a variety of models, all of which the Department for Education (DfE) has managed directly or indirectly. In the case of GCSEs,⁴ the DfE has led the review, either through direct drafting or by commissioning proposals from exam boards. In the case of AS and A levels,⁵ the DfE has overseen the process, either led by the exam boards (alone or under the independent chairing of Professor Mark Smith) or led by the A Level Content Advisory Board. Neither the Government nor the A Level Content Advisory Board intends to take a role in reviewing subject content for the remaining subjects.

3. Subject content

- 3.1. We expect any qualification's syllabus, curriculum or programme of study to be set out as core content. By 'core content' here, we mean the minimum⁶

⁴ The subjects at GCSE are: maths, English language, English literature, biology, chemistry, physics, geography, history, religious studies, citizenship, art & design, music, dance, physical education, computer science, drama, design & technology (DT), and the modern foreign and ancient languages.

⁵ The subjects at A level are: maths, further maths, English language, English literature, English language & literature, biology, chemistry, physics, history, geography, psychology, business studies, computer science, design & technology (DT), economics, art & design, sociology, and modern foreign and classical languages.

⁶ In different subjects and qualifications this might be a proportion of or all the expected content.

knowledge and skills or abilities that students need to develop throughout a course of study and the learning outcomes expected of them after taking the course.

- 3.2. Content can be made more or less demanding by increasing or decreasing the breadth of material to be learned, or the breadth of skills to be acquired. Content can also be made more or less demanding by increasing or decreasing the depth to which the subject matter is studied, or the level of proficiency of the skills to be acquired. Content and assessment are both important in assuring the validity and comparability of qualifications.
- 3.3. Currently, we require exam boards to publish a specification for each qualification they offer, setting out its specific content and assessment arrangements. For qualifications in subjects only offered by one exam board, the specification is usually the only place where the content is specified.
- 3.4. GCSEs, AS and A levels in most subjects are offered by two or more exam boards, and people treat qualifications in the same subjects from different exam boards as basically the same. Where qualifications claim to have the same purpose and assess the same content it is important there are clear, common expectations about what that means, if we want those qualifications to be valid and comparable.
- 3.5. As qualifications in the remaining subjects could all be offered by more than one exam board, we believe we should require exam boards to develop qualifications that are based on defined core content. This core content is the minimum common content we would expect all exam boards offering the qualification in that subject (with the same purpose and/or title) to cover.
- 3.6. Without core content, qualifications in the same subject would not be of comparable demand or the same standard. We think core content is essential in ensuring qualifications are based on the right standard. It makes clear all the minimum, common requirements for each qualification. The core content development process we propose allows stakeholders to comment on content, leading to a single, definitive set of expectations.

4. Developing core content

- 4.1. We have considered how core content could be developed in the remaining subjects.

- 4.2. Last year, the Education Select Committee recommended we set up national subject committees,⁷ with representatives from across the subject, to determine subject content in all subjects (not just remaining subjects) and develop a national syllabus in each subject. However, this would require a statutory change to our remit, and so would take time to establish. We are a qualifications regulator rather than a National Curriculum authority, and as far as we know Government doesn't want to change our remit. In any event, core content has already been determined in many subjects without this statutory change.
- 4.3. As curriculum is largely a matter for Government, we have considered proposing that, in future, GCSE, AS and A level qualifications should only be developed in subjects where the DfE publishes content, and requiring all other qualifications to be withdrawn. However, this would likely result in a much more limited choice than now, and we are duty bound to have regard to the need to ensure a reasonable choice of qualifications.
- 4.4. Our preferred option is to allow exam boards to work together to develop core content, while we impose regulatory requirements on how they do it. As core content is central to maintaining standards, as discussed above and in appendix A, we do not consider that exam boards should be able to develop GCSE, AS and A level qualifications unless core content has first been determined. We believe this approach will strike the right balance between ensuring a reasonable range of subjects and involving the right expertise at the right stages. We will require exam boards to give subject associations and other key stakeholders such as teachers, employers, and higher education and further education representatives the opportunity to engage with core content development so they can be sure the new qualifications are fit for purpose.

Development process

- 4.5. Our proposed approach is not dissimilar to some of the approaches taken already in developing the reformed subjects. It builds on that experience, and on the good practice we have identified in other sectors,⁸ where members of an industry work within a well-defined collaborative framework under the watch of

⁷ House of Commons Education Committee (2012) *The Administration of Examinations for 15–19 Year Olds in England – First Report of Session 2012–13*. London, the House of Commons. Available at: www.publications.parliament.uk/pa/cm201213/cmselect/cmeduc/141/141.pdf

⁸ We propose to require exam boards, using their best endeavours to work together, to establish an agreement to govern the way they will collectively develop core content for all reformed GCSE, AS and A level qualifications.

the regulator, and subject to veto/approval and dispute-resolution by the regulator.

- 4.6. Our framework will define and detail how exam boards can work together (and with third parties) on core content. We would not expect every exam board to be involved with all proposed subjects, but we would require them to comply with core content produced by this process. This creates a big incentive for them to join in and reach agreement to get it right.

Engaging with others

- 4.7. As exam boards must use core content in developing their individual qualifications for a subject, it is important we make sure enough consultation has taken place with all the groups of stakeholders who have an interest in, or will be affected by, the requirements for that subject.
- 4.8. We will require exam boards to make sure those with an interest in the subject can contribute to its development, and we will require them to consult with a suitable range of stakeholders. Exam boards must show us how they have engaged with those stakeholders (including equality groups) and considered their views.
- 4.9. Before accepting core content, we will consider if it is of the right demand and can be assessed in ways that produce valid and reliable results. We will make clear our expectations in acceptance criteria for core content in each subject.

Assessment arrangements

- 4.10. Public confidence in current qualifications has been dented by concerns about whether their assessment arrangements produce valid enough results, and we generally find it hard to justify the current assessment arrangements, subject by subject. We want suitable, consistent and principle-based⁹ assessment arrangements, those most likely to produce valid outcomes and inspire confidence. We will take account of exam boards' content recommendations, and (as we have done for the reforms to date) consult on our proposals in each remaining subject, covering for example:
 - exam and non-exam assessment arrangements;
 - tiering models, where required; and

⁹ We have already consulted on these principles here: <http://comment.ofqual.gov.uk/gcse-reform-june-2013> and <http://comment.ofqual.gov.uk/a-level-regulatory-requirements-october-2013>

- the assessment objectives.

Principles to determine subject availability

- 4.11. Curriculum issues are not within our statutory remit. We can only be concerned about the range and types of subjects here if they touch upon our statutory objectives and duties. These objectives and duties include maintaining standards and public confidence in these qualifications, balanced against our duty to make sure there is an appropriate range of subjects.
- 4.12. Our proposed approach to content development should produce good-quality content, but it will require initial investment by exam boards. They are each likely to consider carefully which subjects to carry on and to only propose subjects where there is new demand, or where the existing and/or potential future market is large enough. They can choose not to offer subjects if they wish, and each exam board will take the opportunity to review its range of subjects.
- 4.13. In addition, we propose to regulate in ways that are likely to affect the range of subjects available. We plan to set out clear principles that we will use to determine, before core content is developed, if a subject is likely to lead to the development of the GCSE, AS and A level qualifications we expect. If a subject does not meet these principles we will not allow it to be developed as a GCSE, AS or A level subject. There are five matters we will consider:

A) Purpose

- 4.14. We have already consulted on the primary purposes of GCSEs, AS and A levels, and we propose that subjects for each type of qualification should meet the relevant purpose. This may seem an obvious requirement, but, looking at the different purposes, we think a small number of existing subjects will struggle.
- 4.15. GCSEs must provide:
- evidence of students' achievements against demanding and fulfilling content;
 - a strong foundation for further academic and vocational study, and for employment;
 - if required, a basis for schools and colleges to be held accountable for the performance of all of their students.

- 4.16. AS qualifications must:

- provide evidence of students' achievements in a robust and internationally comparable post-16 course of study that is a subset of A level content;
- enable students to broaden the range of subjects they study, and support progression to further study or employment.

4.17. A levels must:

- define and assess achievement of the knowledge, skills and understanding will be needed by students planning to progress to undergraduate study at a UK higher education establishment, particularly (although not only) in the same subject area;
- set out a robust and internationally comparable post-16 academic course of study to develop that knowledge, skills and understanding;
- permit UK universities to accurately identify the level of attainment of students;
- provide a basis for school and college accountability measures at age 18; and
- provide a benchmark of academic ability for employers.

B) Level of demand

4.18. As we discussed earlier, different subjects should be set, as far as possible, at the same level of demand as other subjects within the same qualification type. This is important, not only for public confidence but to maintain standards.

C) Validity

4.19. Validity is a complex but central concept for qualifications, and we have more work to do to make sure all regulated qualifications are valid. Here we are focused on the relationship between subject content and validity: subject content should be able to act as a foundation for qualifications that will produce valid and reliable results, and assessments for that subject content must be manageable across large cohorts of students. We expect assessment to be mainly by exam. Non-exam assessment should only be proposed when it is the only valid way to assess essential elements of the subject.

D) Differentiating student performance

4.20. New GCSE qualifications will be graded using the numbers 1 to 9, with 9 being the highest grade. A levels will continue to be graded from A* to E, and AS qualifications from A to E. In all cases, students may be unclassified (U), in

which case they do not receive a certificate. We propose that exam boards demonstrate to us that the content in each subject can be used as a basis for assessing students effectively against the full grade range for the type of qualification.

E) Separation of subjects

4.21. There are different views about the appropriateness of the range and variety of GCSE, AS and A level subjects, and some of the more unusual subjects concern us from a standards perspective. In England we have a large range of subjects and a variety of qualifications with different titles and some overlap (for example, biology and human biology). This can be confusing, and it makes standards difficult to maintain.

4.22. We think that each subject's content should be distinct. As we said earlier, we propose that core content is developed for each subject. What is more, while we do not suggest it's easy to ensure comparability between subjects at the moment, we do say that the more subject variants there are in qualifications that claim to serve the same purpose and cover similar subject areas, the more difficult it is to ensure validity and comparability.

4.23. There will be instances where a strong case can be made for similar or overlapping subjects – usually where the primary purpose or stakeholder expectations for each subject are different – and such subjects should continue to be permitted. However, we want to avoid giving exam boards free rein to develop subjects where we cannot be confident of their standard, and this is a particular problem with similar or overlapping subjects. We propose to prevent exam boards from producing variations of a subject unless there is a strong case to do so.¹⁰

5. Last award of current qualifications

5.1. In light of the differences in assessment structure between the reformed and unreformed qualifications, we do not believe that reformed GCSE, AS or A level qualifications should run alongside unreformed versions for any longer than necessary.

5.2. This is consistent with our approach to the subjects currently being reformed – that both the unreformed and reformed versions of a subject are not awarded in the same year (with the unavoidable exception of AS qualifications). Therefore,

¹⁰ We would underpin this requirement with a new Condition of Recognition, through which we would also specify when and how we would allow exceptions to be made.

where reformed qualifications are being introduced in 2015, the last award of their predecessors will be in 2016. Likewise, for those being introduced in 2016 the last award of their predecessors will be in 2017, and so on.

- 5.3. We expect the last awards of all other unreformed GCSEs, AS and A levels to happen in 2018. We do not expect to make any exceptions to this, but we do want to avoid unnecessary gaps in provision. If necessary, we will reconsider the position in 2016.
- 5.4. This would mean that any remaining unreformed GCSE, AS and A level qualifications will be withdrawn with effect from 2017 (all final awards in 2018; last entry to a two-year course of study would be 2016) or reformed for first teaching from 2017 with first award from 2019 (2018 for new AS qualifications) and beyond.¹¹

Last awards of similar subjects

- 5.5. There are some existing GCSE, AS and A level qualifications that are similar to subjects already reformed or being reformed. If left as things are, reformed qualifications would be running alongside unreformed ones in similar but not quite the same subjects. We think this would be confusing, and not in the best interests of students (for whom we want the best educational outcomes) or higher education or employers, who would expect students to have been taught the new content and assessed in comparable ways.
- 5.6. To give an example, new core content has been published for biology AS and A level qualifications, and these are being developed for first teaching in 2015. Some exam boards also award AS and A level qualifications in human biology, which are used and accepted by many higher education institutions as an alternative to biology. However, some human biology qualifications have been developed using the previous biology subject content or a mix of the chemistry, science, geography and geology content. They are also structured very differently from the reformed biology qualifications: they are unitised, they contain at least 20 per cent non-exam assessment and the AS will continue to contribute to the overall grade. It will, therefore, be very hard for exam boards to assure us or others that the biology and human biology qualifications are comparable in the future.

¹¹ We will consult on the technical details of this change in a further consultation. We propose to revise the accreditation criteria for the remaining GCSEs, AS and A levels to mirror those for the new qualifications.

- 5.7. In the same way that we will not normally allow unreformed and reformed qualifications in the same subject to be awarded in the same year, we believe allowing similar subjects to be awarded at the same time is undesirable: content may be of a different level of demand (especially in GCSEs); there will likely be a different balance of external and internal assessment; the unreformed qualifications have a unitised structure; GCSEs will use different grading scales, and, at A level, the AS qualification will continue to contribute to the overall grade.
- 5.8. We propose to put in place mechanisms now to discontinue unreformed qualifications in similar or overlapping subjects that are unlikely to meet our standards requirements. We think it important to do this in a considered way. We do not want any particular valuable qualification unavailable for any time if a strong case can be made for the subject and where its subsequent reform would bring it in line with our regulatory expectations. We do, however, want to stop unacceptable alternative provision from continuing.
- 5.9. Therefore, as new core content is published in specific subjects, we propose to introduce a cut-off date for the award of any similar or overlapping qualifications in line with the first awards of a reformed subject. Any remaining unreformed qualifications will continue to be awarded until 2018. Exam boards will need to decide whether they want to propose these subjects for reform for first teaching in 2017. We should say that even if we permit certain subjects to continue until 2018, there is no guarantee that exam boards will choose to carry them on and reform them.
- 5.10. In taking this approach we do not wish to rule out the reform of appropriate alternative qualifications – exam boards would still be able to propose to develop core content for such qualifications for first teaching in 2017 or thereafter. However, where we decide that a unreformed qualification does not meet our proposed regulatory expectations we would not expect to see it proposed for reform in the future unless a strong case could be made in the first place to keep it.
- 5.11. You can see from appendix B to which current subjects we are proposing this approach should apply. We welcome your views on whether it is right to discontinue these subjects as proposed. We are particularly interested in understanding whether some of these qualifications do in fact serve a very distinct purpose and should stay as subjects in their own right, or whether there are other qualifications we have not identified that are no longer fit for purpose and provide unnecessary duplication and confusion.
- 5.12. We would bring these changes into effect by revising the accreditation criteria of the alternative unreformed subjects to bring them into line with the accreditation

criterion for new GCSEs, AS and A levels. We could also apply the new Condition of Recognition on overlapping subjects (discussed above). We will consult on the detail of this process at a later date.

6. Impact analyses

Equality

- 6.1. We are a public authority to which the public sector equality duty in the Equality Act 2010 applies. This duty requires us to have due regard to the need to:
- eliminate discrimination;
 - advance equality of opportunity between persons who share a protected characteristic and those who do not; and
 - foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 6.2. We recognise the importance of making sure regulated qualifications do not unfairly discriminate against or prejudice students with protected characteristics.¹² Assessments should be fair for all students. Our Conditions of Recognition require exam boards, when designing assessments, to remove factors that may disproportionately affect students who share protected characteristics, and we also require exam boards to make reasonable adjustments to meet the needs of students with disabilities. These Conditions of Recognition would apply to exam boards using core content that has been developed co-operatively, as described above.
- 6.3. We will still expect all these requirements to be met when core content is developed through the regulatory framework.
- 6.4. We will embed equality considerations into the regulatory framework. We propose to require exam boards to seek and take account of the views of equality groups during core content development. We will also take account of equality considerations before accepting each core content proposal into our regulatory framework.

¹² The protected characteristics under the Equality Act 2010 are: age, disability, gender reassignment, marriage and civil partnerships, pregnancy and maternity, race, religion or belief, and sex or sexual orientation. Under section 149 of the Equality Act 2010, we are not required to consider the impact of the reforms on those who are married or in a civil partnership.

- 6.5. Our Conditions of Recognition will make sure equality considerations are taken into account when each exam board develops its individual specification for a qualification.
- 6.6. Through preliminary analysis we have considered the effects of these proposals.
- 6.7. As now, the range of GCSEs, AS and A levels available depends on exam boards choosing to develop and award them. However, our proposals may increase the likelihood of exam boards choosing not to continue with some existing subjects, particularly niche subjects.¹³ This may have an impact on some students with particular protected characteristics. But there is nothing to stop exam boards choosing to offer other qualifications in these subjects.
- 6.8. Conversely, we think our proposals provide a more structured way for qualifications to be developed in future. This may benefit some students with particular protected characteristics. If a particular subject group or equality group wished to see a qualification developed, could show enough demand for it and it would meet our expectations, they could approach an exam board to develop core content for the subject so a GCSE, AS or A level could potentially be offered.
- 6.9. With the exception of that above, we have not yet identified any other aspects of our proposals for regulating core content development that may have a negative impact on students because of age, disability, race, gender reassignment, pregnancy and maternity, religion or belief, or sex or sexual orientation.
- 6.10. We are continuing to consider the equality impacts of our proposals, and we hope to use this consultation to increase our understanding of any possible effects to inform our eventual decisions.
- 6.11. We encourage everyone who responds to this consultation to consider the potential equality effects of the proposals and to give us any relevant information or evidence they may have.
- 6.12. We will take all the information and evidence we receive into account in our decision-making.

¹³ It is important to note that language qualifications do not form part of these proposals. All GCSE, AS and A level languages qualifications are being reformed through the current reforms. Therefore, modern foreign languages qualifications (including those in community languages) can be developed (if an exam board chooses to do so) in accordance with the modern foreign languages content that will be published by the DfE.

Regulatory

- 6.13. GCSE, AS and A level qualifications are some of the most popular qualifications undertaken by 16- to 18-year-olds. Therefore, we must consider the potential impacts of these proposals, if introduced, on the various groups of stakeholders directly affected: higher education institutions, learned societies, colleges, schools, exam boards and students.
- 6.14. Before we take final decisions, we will evaluate and take into account the potential impacts of these proposals. Where we have yet to refine the details of the proposals, we will consider how to do this in the best, and least burdensome, ways.
- 6.15. When we announce our final policy, we will also publish a regulatory impact assessment of the effects of our decisions.

Appendix A

Qualifications need to be of the right standard and deliver what the public expect.

Qualifications must be designed so they:

- are valid – they assess what they are intended to assess, for example the ability to develop and sustain an argument about a historical event cannot be validly assessed by multiple-choice questions, whereas recall of historical dates can;
- are reliable – the outcome of the assessment (the mark or grade) for a student would usually be the same if the assessment was repeated;
- minimise bias – the assessment must not produce unreasonably adverse or unduly positive outcomes for particular groups of students, for example assessments should not lead to male students performing less well than female students for reasons unconnected to the knowledge or skills being assessed;
- are comparable – the standard of the assessment (in terms of the subject matter, the complexity of the questions or other assessment tasks, and the level of performance students need to be awarded a mark or grade) should be comparable whenever the assessments are taken and marked, and whichever exam board sets the assessment and awards the qualification;
- are manageable – the time and resources used in preparing for and sitting the assessments are reasonable for both students and schools or colleges, and are proportionate to the purpose of the qualification.

Standards are at the heart of what we do. We believe it is important to be clear about what we mean when we talk about standards in the context of assessing people's knowledge and skills.

There are three different aspects to the standard of a qualification that determine its level of demand:

- the content standard;
- the assessment standard;
- the performance standard (or grade standard).

A good qualification covers appropriately demanding and relevant content and supports good teaching and learning. By level of demand we mean how challenging an assessment or qualification is for the person who takes it. Demand is usually shown through a combination of the following factors:

- level of subject knowledge required;

- skills or processes to be applied;
- level of abstract thinking needed;
- strategy a student uses to structure a response to a question/task.

It is possible to set a highly demanding assessment against content that might be seen as low demand. But it is also possible to have very demanding content with low-demand assessment. Neither extreme is likely to result in an appropriate performance standard; clearly, qualifications claiming to deliver the same learning outcomes may be quite different, unless the content and assessment arrangements are each comparable.

The performance standard defines how well students must perform to be awarded a particular grade. The performance standard plays a key part at the end of the process, and we are consulting on our proposals in that regard separately.¹⁴

¹⁴ You can read more about the performance standard in our consultation *Setting the Grade Standards of New GCSEs in England*, available at: <http://comment.ofqual.gov.uk/setting-the-grade-standards-of-new-gcses-april-2014> .

Appendix B

Alternative (similar or overlapping) GCSE subjects we are proposing to discontinue

Subject (proposed last award 2016)	UK awards 2012	Related continuing subject(s) (for first teaching 2015 and first award 2017)
Digital communication	3,089	English language
Subject (proposed last award 2017)	UK awards 2012	Related continuing subject(s) (for first teaching 2016 and first award 2018)
Expressive arts	3,948	Dance; Drama
Electronics	1,046	DT: electronic products
Catering	20,891	DT: food technology
Home economics	32,064	DT: food technology
Manufacturing	105	DT: product design
Engineering	1,816	DT: systems and control technology
Performing arts	4,365	Dance; Drama
Humanities	13,782	History; Geography
Applied science	9,577	Science
Additional applied science	19,151	Science
Environmental science	941	Science
Environmental and land-based science	1,333	Science
Human health and physiology	2,226	Biology

Alternative (similar or overlapping) AS subjects we are proposing to discontinue

Subject (proposed last award 2016)	UK awards 2012	Related continuing subject(s) (for first teaching 2015 and first award 2016)
Science in society	942	Sciences
Applied science	5,141	Sciences
Environmental studies	2,370	Sciences
Human biology	3,995	Biology
Applied art & design	645	Art & design
Humanities	N/A	History; Geography (2017)
Economics and business	2,890	Economics; Business studies

Applied business	9,841	Business studies
Home economics (food, nutrition and health)	506	DT: food technology
Engineering	N/A	DT: systems and control technology
Performance studies	1,220	Dance; Drama and theatre studies
Performing arts	1,873	Dance; Drama and theatre studies
Subject (proposed last award 2017)	UK awards 2012	Related continuing subject(s) (for first teaching 2016 and first award 2017)
Quantitative methods		Mathematics
Use of mathematics	2,998	Mathematics

Alternative (similar or overlapping) A level subjects we are proposing to discontinue

Subject (proposed last award 2016)	UK awards 2012	Related continuing subject(s) (for first teaching 2015 and first award 2017)
Science in society	123	Sciences
Applied science	2,815	Sciences
Environmental studies	1,426	Sciences
Human biology	1,899	Biology
Applied art & design	524	Art & design
Humanities	N/A	History; Geography (2018)
Economics and business	1,954	Economics; Business studies
Applied business	6,656	Business studies
Home economics (food, nutrition and health)	333	DT: food technology
Engineering	225	DT: systems and control technology
Performing arts	1,329	Dance; Drama and theatre studies
Performance studies	1,039	Drama and theatre studies
Subject (proposed last award 2017)	UK awards 2012	Related continuing subject(s) (for first teaching 2016 and first award 2018)
Quantitative methods	N/A	Mathematics
Use of mathematics	680	Mathematics

GCSE subjects to be considered for reform, for first teaching from 2017¹⁵

(last award of unreformed GCSEs in 2018)

Subject	UK awards 2012
Ancient history	346
Applied business	4,386
Astronomy	2,723
Business and communication systems	14,936
Business studies	57,339
Business studies and economics	3,740
Classical civilisation	4,395
Economics	3,582
Film studies	5,335
General studies	7,608
Geology	1,070
Health and social care	7,726
Hospitality	1,452
Information and communication technology	42,310
Law	2,889
Leisure and tourism	3,382
Media studies	55,851
Psychology	12,986
Sociology	21,951
Statistics	50,530

AS qualifications to be considered for reform, for first teaching from 2017¹⁶

(last award of unreformed AS qualifications in 2018)

Subject	UK awards 2012
Accounting	7,579
Anthropology	512
Applied information and communication technology	13,552
Archaeology	998
Citizenship studies	4,934

¹⁵ Where more than one title relates to a specific subject, we will consider how to apply our principles in the development of the new core content.

¹⁶ Where more than one title relates to a specific subject, we will consider how to apply our principles in the development of the new core content.

Classical civilisation	3,403
Classics	5,124
Communication and culture	3,376
Creative writing	N/A
Critical thinking	13,789
Electronics	2,131
Film studies	10,256
General studies	56,519
Geology	3,224
Government and politics	20,214
Health and social care single award	10,548
History of art	873
Information and communication technology	16,970
Law	22,496
Leisure studies	1,015
Media studies	34,388
Media: communication and production	637
Music technology	3,018
Philosophy	5,788
Statistics	1,404
Travel and tourism	3,360
World/global development	2,101

A levels to be considered for reform, for first teaching from 2017¹⁷

(last award of unreformed A levels in 2018)

Subject	UK awards 2012
Accounting	3,791
Anthropology	96
Applied information and communication technology	8,725
Archaeology	509
Citizenship studies	929
Classical civilisation	2,403
Classics	4,133
Communication and culture	2,118
Creative writing	N/A

¹⁷ Where more than one title relates to a specific subject, we will consider how to apply our principles in the development of the new core content.

Critical thinking	229
Electronics	1,165
Film studies	6,882
General studies	35,381
Geology	2,064
Government and politics	14,148
Health and social care single award	6,701
History of art	943
Information and communication technology	9,492
Law	13,144
Leisure studies	956
Media studies	24,503
Media: communication and production	455
Music technology	4, 819
Philosophy	3,211
Statistics	747
Travel and tourism	1,997
World/global development	610

Information pages

About you

1. Are the views expressed in response to this consultation your personal views or an official response from the organisation you represent? (tick one only)*

- Personal views
- Official response from an organisation/group

If you ticked 'personal views', are you a ...? (tick one only)*

- Student
- Parent/carer
- Teacher (but not responding on behalf of a school)
- Educational specialist (retired teacher, examiner, assessment expert, subject expert, governor) – please state which capacity _____
- General public (interested in education but no direct link) – please state which capacity _____

2. If you ticked 'official response from an organisation/group', please state which type of responding organisation you represent (tick one only)*

- Awarding organisation
- Government department/agency or organisation
- Local authority
- University or higher education institution
- Employer
- School/college (please complete the next question)
- Other representative group / interest group (please skip to 'type of representative group/interest group')

3. Which school/college type do you represent?

- Academy and/or free school
- Comprehensive
- State selective
- Independent/private
- Special school
- Further education
- Sixth-form college
- None of the above (please state what)

4. Type of representative group/interest group

- Group of awarding organisations
- Union
- Business representative group
- Equality organisation/group
- Subject associations/learned societies
- School or teacher representative group

Other representative/interest group (please state what)

MEI is a charity and a membership organisation. It is an independent curriculum development body for mathematics. It is a major provider of mathematics teaching and learning resources, and of mathematics CPD for secondary school and post-16 mathematics teachers.

MEI developed and manages the DfE-funded Further Mathematics Support Programme.

5. Nation*

- England
- Wales
- Scotland
- Northern Ireland
- Other EU country (please state which) _____
- Non-EU country (please state which) _____

Questions

Q1. To what extent do you agree or disagree with the following statement? Core content – common content across all exam boards offering a qualification – will help make sure qualifications are fit for purpose.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

A level mathematics has had for 10 years a core content, counting for two-thirds of the syllabus content, and has had common assessment objectives and common aims. These contribute in part to whether A level mathematics is fit for purpose, but there are other important factors which need to be considered. Some of these are within the remit of the regulator.

Q2. To what extent do you agree or disagree with the following statement? Core content – common content across all exam boards offering a qualification – will help make sure qualifications are comparable across exam boards.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

We agree that a substantial amount of core content is desirable, but this is not a sufficient or over-riding reason in itself to force 100% common content on a particular subject. In many subjects there should be room for learner-choice; this is particularly true as the number of subjects is reduced. GCE Mathematics and Further Mathematics have so many applications and users that some choice is desirable.

Where core content does not cover 100% of a subject, making sure that awarding is consistent across exam boards is harder if the examination is linear. For example, in mathematics, because currently the core content is covered in four units by all the exam boards, it would be possible to compare candidate achievement in these units across exam boards.

Q3. To what extent do you agree or disagree with the following statement? Core content – common content across all exam boards offering a qualification – will help make sure qualifications are comparable over time.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

It is not clear how this would contribute, once a common standard has been set in the first year.

Q4. To what extent do you agree or disagree with the following statement? Core content – common content across all exam boards offering a qualification – will help make it easier for users* to understand the qualification.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

* Persons with a legitimate interest in the qualification or type of qualification made available by the awarding organisation, who may include: (a) Learners and Learners' representatives; (b) Centres; (c) Teachers; (d) employers and employers' representatives; (e) further and higher education establishments; (f) schools; (g) government departments and agencies; and (h) professional bodies.

Again, this is true, but it is not an overriding reason for having 100% common content. Many users may wish learners to have some choice within the qualification.

Q5. We propose to set up a regulatory framework to let exam boards develop core subject content. To what extent do you agree or disagree with our proposal?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

It is not at all clear that this is really Ofqual's responsibility to decide: 'We are not responsible for curriculum or subject content' para 2.4. If it is, then it should be done properly and Ofqual should follow the advice of the Education Select Committee (and many others¹⁸), referred to in para 4.2, and set up subject committees. Giving this responsibility to exam boards is not satisfactory; this would lock in even further the

¹⁸ For example, the Royal Society
<https://royalsociety.org/~media/education/policy/vision/reports/vision-full-report-20140625.pdf>

dominance of assessment over curriculum which is a major curse in the English education system.

Q6. If you disagree with our proposal, are there other options we have not considered?

Ofqual should work with the DfE to establish a coherent route for curriculum and qualification maintenance, development and reform. The current system, described in your Foreword, does not begin to match the sensible arrangements seen in high-performing jurisdictions.

Q7. To what extent do you agree or disagree that exam boards should consult with stakeholders and take their views into account when developing core content for all reformed GCSE, AS and A level qualifications?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

We certainly agree that consultation with stakeholders is crucial. In the case of mathematics these stakeholders should include the many users of the subject.

However, given that we do not believe that exam boards should have responsibility for developing core content, we do not believe this is a sensible arrangement. To avoid assessment driving the curriculum the consultation should be the other way round: a serious curriculum body, led by stakeholders, should consult with exam boards to check that assessment arrangements are appropriate.

Of course, exam boards should be encouraged to consult widely when developing specifications. It is at the earlier stage of the development of the curriculum and core content that we think that exam boards should not be leading the process.

On a practical note, some important bodies in mathematics and the sciences refuse to engage with exam boards.

Q8. We have identified key stakeholder groups that need to be consulted in core content development (subject associations, teachers, employers, higher and further education, relevant equality groups). To what extent do you agree or disagree with our proposal that exam boards should include these groups when developing core content?

- Strongly agree
- Agree

- Disagree
- Strongly disagree
- Don't know/no opinion

See response to question 7.

Q9. Are there other stakeholders you believe should be consulted?

In the case of mathematics and related subjects (eg statistics, use of maths, quantitative methods), stakeholders from a wide range of subjects should be consulted because mathematics either underpins or has important applications across a wide range of subjects.

Q10. To what extent do you agree or disagree that the benefit of having additional (to those already being reformed) GCSE, AS and A level subjects is worth any additional costs incurred by exam boards in developing core content (common content across all exam boards offering a qualification)?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

Our main concern with the proposal in para 4.4 for joint exam board work is that it introduces another bar to the development of new subjects and courses. The system is becoming too rigid and unresponsive. Technology is driving huge changes in the content of Higher Education courses and the world of employment but a combination of assessment driving the curriculum and a ponderous system for development of new qualifications results in a post-16 curriculum which cannot keep up with these changes.

Q11. To what extent do you agree or disagree that we should develop principles to determine in advance which remaining or new subject areas can be developed as GCSE, AS or A level qualifications?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

This should not be solely Ofqual's responsibility. See previous responses.

Q12. Please indicate the extent to which you agree or disagree with each statement below:

Current GCSEs/AS/A levels cannot always be easily distinguished from others with a similar title.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

Anyone who needs to understand the differences, eg between Biology and Human Biology, can easily find out.

Subjects that can be easily distinguished will help make it easier for users* to understand the different qualifications available.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

* Persons with a legitimate interest in the qualification or type of qualification made available by the awarding organisation, who may include: (a) students and their representatives; (b) Centres; (c) Teachers; (d) employers and employers' representatives; (e) further and higher education establishments; (f) schools; (g) government departments and agencies; and (h) professional bodies.

GCSE/AS/A level subjects should be easily distinguished from other GCSE/AS/A level subjects.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

GCSE/AS/A level subjects should only be developed if they meet the specific qualification purpose.

- Strongly agree
- Agree
- Disagree

- Strongly disagree
- Don't know/no opinion

It needs to be recognized that qualification purpose may change over time.

The performance of students taking GCSEs/AS/A levels in any subject should be able to be differentiated against the full grade range using the relevant grading scale.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

In general this should be the case. However we would like to see further discussion about the possibility of a 'mature GCSE' in mathematics for post-16 students who are re-sitting. We would not want to rule out the possibility that a mature GCSE specification could be offered with a limited grade-set. The new GCSE in mathematics is tiered so, in effect, a limited grade-set is offered to each student; we are suggesting that the rules should allow for a Foundation-only specification to be permitted in these particular circumstances. (Of course the pre-16 GCSE will still be available for those re-sit students who may be capable of the top grades.)

So, at the *subject* level we certainly agree that 'the performance of students ... should be able to be differentiated against the full grade range' but we would like the possibility that this does not have to be the case at *specification* level for subjects where the assessment is tiered.

GCSE/AS/A level subjects should be set at a level of demand consistent with that of reformed qualifications.

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

It is not clear that reformed qualifications do have a consistent level of demand. Ofqual has proposed that GCSE English and GCSE mathematics should continue to have different outcomes (Ofqual: Consultation on Setting the GCSE Standards of new GCSEs in England: paras 3.6 to 3.10)

GCSE/AS/A level subjects should be capable of being validly assessed (mainly by exam assessment, except for those essential skills that can't be assessed by an exam).

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

We certainly agree that assessments should be valid, but this expectation should lead to a wider range of assessment instruments rather than a narrower curriculum. The current direction of movement seems to be that assessment should (nearly) always be by exam, so only curriculum items which can be validly assessed by exams can be part of the GCSE/A level. We strongly disagree with this direction of travel.

This is an example of assessment driving (and narrowing) the curriculum. Who is to decide which essential skills cannot be assessed by an exam? The recent experience with practical skills in science suggests that the curriculum experts (the much-consulted stakeholders) are ignored and that concerns about reliability of assessment prevail at the expense of validity. We would argue that there are several essential skills in mathematics and related subjects which cannot be validly assessed by exam, but we are not confident that such views will be listened to.

Q13. Do you think that requiring the last award of all unreformed GCSE qualifications by 2018 is appropriate?

Yes

If No, please comment in relation to the specific subjects.

.....

Q14. Do you think that requiring the last award of all unreformed A level qualifications by 2018 is appropriate?

No

If No, please comment in relation to the specific subjects.

There should be appropriate re-sit arrangements in all subjects.

Q15. Do you think that requiring the last award of all unreformed AS qualifications by 2018 is appropriate?

No

If No, please comment in relation to the specific subjects.

See Qu 14.

Q16. To what extent do you agree or disagree that we should start to apply our principles, to discontinue similar or overlapping qualifications alongside the current reforms?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Don't know/no opinion

Previous responses indicate why we believe this.

Q17. Referring to the full list of qualifications we are proposing to discontinue as subjects are reformed, listed in appendix B, are there any other qualifications that should be included in the process?

No. GCSE statistics should be reformed; it provides an opportunity for students to use the statistical problem solving cycle and to learn generic skills which are transferable to other subjects and to further study.

If Yes, please comment in relation to the specific subjects.

.....

Q18. Do any of the similar or overlapping qualifications we have proposed in appendix B serve a very distinct purpose from the reformed subjects?

Yes

If Yes, should any alternative qualifications be granted an exception to continue alongside the reformed ones in a given subject?

Yes/No

If Yes, please list and comment in relation to the specific subjects.

This response is about Quantitative Methods, and may apply to Use of mathematics.

Mathematics is a vast subject in itself, with many applications. It is changing rapidly in the real world. It has many users. It is surely an exception to the rule (para 4.22) that 'each subject's content should be distinct'. There is considerable overlap between the mechanics topics in A level Physics and A level Mathematics, the statistics concepts from A level Mathematics are used in many subjects, to say nothing of the use of key mathematical concepts in nearly all subjects. Indeed the mathematical content of several key reformed A levels is required to be listed.

AS and A level Mathematics and Further Mathematics is a particular route through mathematics; it can be regarded as 'an introduction to calculus, with some applications'. It is rather outdated to call it 'mathematics' as though it were the only or essential or best route through the subject. It is (or should be) an essential route for some subjects, particularly the physical sciences, engineering, economics and many aspects of finance.

The increase in the number of students taking mathematics, the fact that many HE courses are far more quantitative than they used to be and the growth of technology and big data means that alternative routes through mathematics and statistics need to be considered.

For these reasons we disagree with the reasoning that says Quantitative Methods and Use of maths should be discontinued because they are similar to or overlapping with Mathematics.

The introduction of Core Maths is an important step, but this is not an A level. We will need eventually a more advanced course in quantitative methods, which will include a considerable amount of statistics, the use of suitable technology (and perhaps programming) to handle large datasets but also other pieces of mathematics – A level statistics is not quite the right subject. We note that New Zealand, highly regarded by several research reports, already has three parallel, equal status, advanced level courses – one centred around calculus, one centred around maths and statistics, one centred round the use of computer algebra systems.

It may be that the introduction of Core Maths is a success, and that in a few years' time it can be developed to have a more advanced option included to meet the need described above. On the other hand, the introduction of Core Maths may not work, and the maths/statistics community will be looking around for a space in the curriculum for an appropriate course. Given the more burdensome proposals for introducing new subjects, it may well be regretted if Quantitative Methods and Use of Maths are removed as subjects.

Q19. Are there any potential equality impacts of our proposals for the next stage of GCSE, AS and A level reform that we have not identified?

Yes/No

If Yes, what are they?

.....

Q20. Are there any additional steps we could take to mitigate any negative impacts of the proposals in this document on persons who share a protected characteristic?

Yes/No

If Yes, please comment on the additional steps we could take to mitigate any negative impacts.

.....

Q21. Have you any other comments on the impacts of the proposals in this document on persons who share a protected characteristic?

Yes/No

If Yes, please comment in relation to the specific subjects.

.....

Q22. Are there any potential regulatory impacts of the proposals in this document that we have not identified?

Yes

If Yes, what are they?

As stated in previous responses, we are concerned about the following.

- Some of these proposals are about issues which should not be solely the concern of Ofqual and exam boards; this exacerbates the current driving of the curriculum by assessment.
- Some of these proposals make the system less responsive to changes in HE and the outside world; in particular introducing new subjects will be increasingly difficult.
- In order to ensure that qualifications meet the needs of students in terms of preparation for HE and the outside world, an effective system of involving stakeholders in development of content needs be put in place.

We are looking at how we provide accessible versions of our consultations and would appreciate it if you could spare a few moments to answer the following questions.

Your answers to these questions will not be considered as part of the consultation and will not be released to any third-parties.

Q23. Do you have any special requirements to enable you to read our consultations? (For example screen reader, large text, and so on)

Yes/No

Q24. Which of the following do you currently use to access our consultation documents? (Select all that apply)

- Screen reader / text-to-speech software
- Braille reader
- Screen magnifier
- Speech to text software
- Motor assistance (blow-suck tube, mouth stick, etc.)
- Other

Q25. Which of the following document formats would meet your needs for accessing our consultations? (Select all that apply)

- A standard PDF
- Accessible web pages
- Large type PDF (16 point text)
- Large-type word document (16 point text)
- eBook (Kindle, iBooks or similar format)
- Braille document
- Spoken document
- Other

Q26. How many of our consultations have you read in the last 12 months?

- 1
- 2
- 3
- 4
- 5
- More than 5

We wish to make our publications widely accessible. Please contact us if you have any specific accessibility requirements.

Published by the Office of Qualifications and Examinations Regulation in 2014

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