Decisions on regulating use of calculators in new GCSEs, AS and A levels

In December 2015 we published a consultation about rules we proposed to put in place governing the use of calculators in all new GCSEs, AS and A levels.

This consultation set out draft GCSE and GCE Qualification Level Conditions, which would apply to all new GCSEs, AS and A levels.

We have reviewed the responses to the consultation and are now announcing our decisions. We are also publishing a detailed analysis of the responses alongside this document.[1]

Approach to regulating use of calculators

In the consultation, we explained that the only qualification where we have set any rules governing the use of calculators in GCSEs, AS and A levels is for the new GCSEs in mathematics which are now being taught in schools.

However, it is clear from responses that some people were unclear about our proposals, and how they relate to the current arrangements for use of calculators in GCSEs, AS and A levels.

Current approach to use of calculators in GCSEs, AS and A levels

All the main exam boards offering GCSEs, AS and A levels have devised – and follow – a joint policy[2] on the use of calculators.

But this is not something they are required to do, and the exam boards' joint policy has no regulatory status. Ofqual cannot hold exam boards to account if they do not comply with this policy, unless they also breach one of our other rules. The exam boards can change this policy without consulting interested parties (such as subject associations).

[1] www.gov.uk/government/consultations/regulating-use-of-calculators-in-new-gcses-as-and-a-levels
[2] www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations

Our proposals

We want to make small, but significant, changes to the current approach. We proposed to introduce rules for all new GCSEs, AS and A levels which would require exam boards to:

- put in place arrangements which ensure that – whenever students can use calculators in exams – the assessments remain fit for purpose,
- keep those arrangements under review, and revise them where necessary, and
- explain and justify their approach in their assessment strategy for the qualification.

We also proposed to withdraw the current (more detailed) rules covering the use of calculators for new GCSEs in mathematics, as these would no longer be needed.

Respondents' views

The majority of respondents supported our proposed approach. But a number of respondents raised concerns about:

- a perceived reduction (compared to current arrangements) in the scope for the public and independent experts to review and scrutinise exam boards' approaches,
- the need to take a different approach for qualifications in mathematics and statistics – where certain calculator functions could have a significant impact on qualification validity,
- the need to prohibit certain calculator functions, which some respondents felt posed a particular threat to assessment validity,
- the scope for actual or perceived differences in demand if exam boards take different approaches to the use of calculators, and
- the risk that different exam board approaches creates confusion for schools.

One respondent also commented that the current self-regulatory approach worked well, and felt there was no need for regulatory intervention. This respondent also commented on the potential regulatory burden that would arise from the requirement on exam boards to justify their approach in each qualification's assessment strategy.

Our response

In the table below, we address each of the issues raised by respondents in turn.

Issue	Ofqual response
Perceived reduction (compared to current arrangements) in the scope for the public and independent experts to review and scrutinise exam boards' approaches.	As explained above, the current arrangements for the use of calculators are a policy agreed between the main exam boards, and are not subject to any formal independent scrutiny. And our proposals provide for formal regulatory scrutiny of exam boards' approaches. But respondents raise a legitimate concern about the need for transparency around exam boards' arrangements – and we have made changes to our proposals (set out below) as a result.
The need to take a different approach for qualifications in mathematics and statistics – where certain calculator functions could have a significant impact on qualification validity.	We agree with respondents that the use of calculators could have a greater impact on validity in some subjects, and that certain calculator functions pose particular risks. Our approach intentionally gives exam boards flexibility to set rules which restrict calculator use where this is appropriate, and to set different restrictions in different subjects. But we also want to allow for other approaches – such as designing more innovative assessments that make appropriate use of calculators and other technology.
The need to prohibit certain calculator functions, which some respondents felt posed a particular threat to assessment validity.	
Scope for actual or perceived differences in demand if exam boards take different approaches to the use of calculators.	Our view is that – provided calculators are used in a way which is appropriate to the assessment – differences in approach should not lead to differences in demand.
The risk that different exam board approaches creates confusion for schools.	The current shared approach to the use of calculators has a number of obvious benefits for schools. And exam boards can continue to use this approach where it is appropriate for their qualifications. At the same time, we think allowing exam boards to explore more innovative

	approaches which could meet schools' needs is a good thing.
Potential regulatory burden if existing assessment strategies must be changed.	We think this is a legitimate concern, and have made changes to our proposals as a result.

Our decisions – a flexible and proportionate approach

Because the use of calculators in exams affects the validity of exams, we still think it is appropriate for us to introduce rules governing the use of calculators in new GCSEs, AS and A levels. But we have made significant changes to our proposals to reflect consultation feedback:

- To address concerns about transparency, exam boards will be required to publish their approach to use of calculators in exams, making clear any restrictions on calculator use.

- In the light of this decision, and the concerns raised about potential regulatory burden, exam boards will not be required to set out their approach to use of calculators in their assessment strategy for every qualification. However, exam boards may wish to include information about their approach to calculator use in assessment strategies where it plays an important role in securing validity.

We have also made a number of changes to simplify the drafting of the Condition, and to ensure it focuses on the outcome exam boards must achieve – assessments that are fit for purpose – rather than the process they might use to achieve that outcome.

Changes to Conditions and requirements for GCSE mathematics

Since we have decided to introduce general rules covering the use of calculators in all new GCSEs, AS and A levels, the subject-specific rules which limit calculator functions in new mathematics GCSEs are no longer necessary. In line with our consultation proposal, we have therefore decided to withdraw these rules.

Impact on existing accredited new GCSEs, AS and A level

Our new rules will apply to all new GCSEs, AS and A levels which allow students to use calculators in exams, including those we have already accredited.

But this does not mean exam boards will need to change their approach to calculator use in subjects we have already accredited, although they can do so if they wish. As explained above, exam boards can continue to use the current shared approach where it is appropriate for their qualifications.

For the new mathematics GCSEs, the detailed rules we are withdrawing are largely identical to the exam boards' shared approach in other subjects, so there will be no need for exam boards to change their arrangements there either.

Next steps

Alongside this document, we have published revised versions of our:

- *GCSE (9 to 1) Qualification Level Conditions and Requirements*[3]
- *GCE Qualification Level Conditions and Requirements* [4]
- *GCSE Subject Level Conditions and Requirements for Mathematics*[5]

[3] www.gov.uk/government/publications/gcse-9-to-1-qualification-level-conditions
[4] www.gov.uk/government/publications/gce-qualification-level-conditions-and-requirements
[5] www.gov.uk/government/publications/gcse-9-to-1-subject-level-conditions-and-requirements-for-mathematics