



## Alternative Certification Model 2020–21: National QA Exercise Key Messages

<b>Subject</b>	<b>Chemistry</b>
<b>Level</b>	<b>Higher</b>

This report provides information on themes emerging from the national quality assurance exercise, which is part of the Alternative Certification Model for National 5, Higher and Advanced Higher courses.

A sample of candidates' assessed work from selected centres was reviewed to determine whether assessment was in line with the national standard. The evidence submitted may have been partial or incomplete and is unlikely to have represented all of the evidence that will be gathered to allow the centre to determine a provisional result.

The centres selected for review in this subject and at this level have been provided with specific feedback on the evidence that they submitted. The comments below highlight key points about the assessment approaches and instruments used and the sampled centres' assessment judgements, for all centres delivering the subject at this level to reflect upon and make any appropriate adjustments.

## Section 1: Comments on approach to assessment

All selected centres submitted partial evidence.

Centre-devised assessment instruments were the most common form of evidence submitted. These ranged from end-of-topic tests through to full course coverage. Most centre-devised assessments were constructed from SQA past papers. There was also limited use of commercial papers and unit assessment support packs.

Most centre-devised assessments were constructed using SQA past papers from 2015 onwards and were therefore appropriate in terms of style of question and mark allocation. In some cases the allocation of marks to some questions was not appropriate. Several centres had used questions from pre-CfE Higher past papers. Some questions assessed content that is no longer in the Higher course and, in some instances, questions were assessing content from the National 5 course. Duplication of questions assessing the same content area of the course was observed. This duplication can lower the level of demand.

Centres had generally aimed to balance course content as recommended. When this balance was not obtained, the assessed content matched the course coverage at the time of the assessment.

The most common issue with centre-devised papers was that they were low in demand. This was caused by some, or all, of the following issues:

- ◆ The skills content of the centred-devised assessments was lower than required in an SQA paper.
- ◆ There were too few skills-based questions.
- ◆ The number of grade A marks was below that recommended.
- ◆ There was only one open question.
- ◆ The marks available for a question were not in line with current SQA papers (for example, 3 marks awarded for percentage yield calculations or 4 marks available for drawing a line graph).

Most of the centre-devised assessment instruments were shorter than the three-hour duration and 120 marks allocated to a full SQA paper and were commonly split into two or three separate papers. This could potentially further lower the demand.

Of the centres that used centre-devised assessments, approximately half stated that they intended to use the 2021 SQA question paper resource at a later date.

## Section 2: Comments on assessment judgements

Most of the marking judgments evidenced were in line with national standards.

A small number of issues arose with marking:

- ◆ Partial marking, particularly of calculations, did not follow the SQA marking instructions.
- ◆ Correct, early rounding in calculations was penalised when the mark(s) should have been awarded.
- ◆ There is no requirement for a certain number of significant figures in Higher Chemistry. If a candidate has rounded correctly, the mark(s) should be awarded.
- ◆ When candidates are asked to provide accurate statements, the response must match the marking instructions and be consistent with the course specification.

The marking of open questions was often not in line with national standards. A holistic approach is required and marks should not be awarded for particular points or for National 5 level chemistry.

A great deal of good practice was evident from the evidence submitted. There was clear evidence of moderation in all submissions, either internally, externally, or both. Changes to marks awarded were clearly annotated and sometimes the justifications for these changes were also given.

It is recommended that all centres check the content of their assessments against the current Higher Chemistry course specification, which was updated for the session 2018–19.

The Higher Chemistry question paper brief, located in 'Guidance on Assessments and Gathering Evidence', published on the Understanding Standards website, details the breakdown of a paper meeting the national standard. Centres should check the breakdown of their centre-devised assessments against this brief. If there is only partial course coverage or insufficient grade A marks then the assessment will be too low in demand and, consequently, not at the national standard. Further assessment evidence will be required before provisional results can be determined.

When considering amendments to the notional grade boundaries, the centre should only take into account the demand of the assessment, in terms of the balance of grade A and grade C questions and the conditions of assessment, for example, a single paper or a split paper. This balance can also be affected by the centre's interpretation of the marking instructions and any modifications made. Grade boundaries should not be amended based on the circumstances of the candidates. In all cases, national standards should be met. The grade A boundary and grade C boundary should be set independently. The grade B boundary is exactly half way between A and C. The grade D boundary is set at 10% below the grade C boundary. The boundary between upper and lower bands is at the halfway point of each grade. It is worth noting that grade boundaries vary from year to year but usually by only a few marks.