

Moderation Feedback – Central

Assessment Panel:

Chemistry

Qualification area

**Subject(s) and Level(s)
included in this report**

Standard Grade Chemistry Practical Abilities

Central Moderation

General comments on central moderation activity

Overall, the Moderation Team felt the standard of assessment of candidate evidence was good and was in line with national guidelines. Most centres deducted marks for badly drawn diagrams but a minority of centres accepted very poor diagrams and some submitted candidate evidence which had not been marked. One centre submitted Investigation Reports on un-revised booklets which used Investigation Skills Objectives that have now been superceded. These were difficult to moderate as current Investigation Skills Objectives had to be matched up with the candidate evidence. Several centres did not have an asterisk printed on form SGER 00 to indicate where to start selecting candidates for moderation. Most followed the 3, 2, 4, 5, 1 sequence but some, with mainly Grade 1 (Practical Ability) candidates, sent evidence for the first 12 individuals on the form.

Specific issues identified

Techniques

A high proportion of centres have adopted the best practice of internal moderation which ensures a consistent approach to assessment of candidate evidence and streamlines the central moderation event. Many centres clearly indicate why marks have been awarded or deducted; this is of great help to moderators.

One centre, which used revised investigation booklets, was still using old style technique report sheets and gave no indication of why marks had been allocated or withdrawn.

The following points are worth noting:

1. D1 Titrations: Guidance on the Assessment of Techniques states there should be a tolerance of 0.2cm^3 within concordant titres. If the “accurate” titres recorded are out with these limits then the candidate has not overtaken key ability 9 (measuring with precision appropriate to the technique) and marks should be deducted from the manipulation total. Some centres are accepting titres as concordant which vary by as much as 0.9cm^3 .
2. Moderators are seeing more of the type of Practical Techniques record sheet which gives considerable guidance to candidates.
3. SQA has issued a Practical Techniques record sheet and moderators would prefer centres to use these to gather candidate evidence. Candidates from one centre used homework jotters to record Practical Techniques and moderators were faced with the task of ploughing through pages of homework to find the techniques.
4. The quality of diagrams accepted by centres varied considerably. Some very poor work was given 2 marks for the write-up whereas other centres subtracted 1 mark from adequate diagrams. Accurate diagrams appear to depend on staff not on area or type of school.
5. Two centres submitted candidate evidence containing techniques sheets which had not been marked, signed or dated. Other techniques sheets had been ticked but no numerical marks had been allocated

Investigations

The vast majority of variables investigated were viable and an increasing number of centres are taking the advice of avoiding the Lather/Current/Voltage/Inks type of investigation. The best practice of internal moderation is being seen more often and this is of great help to moderators.

The following points are worth noting:

1. One centre submitted non-standard investigation booklets without appropriate space to record marks for each of the Investigative Skills Objectives. The use of such booklets is detrimental to candidates as it is not always clear whether the individual objectives have been overtaken.
2. Five centres submitted Investigation booklets which had not been completely marked. Boxes were left blank instead a zero being used to indicate no marks. Criteria had been left unmarked yet 'phantom' marks for these criteria had been added to the total recorded on the front cover. Two other centres used ticks to indicate marks instead of using the digit, 1. The best practice of internal moderation would have identified and corrected these errors.
3. A very small minority of centres are still accepting work from their candidates which is well below the national standard. In these cases marking is often careless; arithmetic, scales, units and plotting of points on graphs have not been checked so undeserved marks have been awarded.

Feedback to centres

The majority of centres assessed candidate evidence accurately and deducted marks for work of poor quality. The reasons for assessment decisions were clear and teacher/lecturer contributions were made in red ink so they could be identified easily. There were, however, a small minority of centres where assessment fell below the national standard. With these centres in mind the following points are worth noting.

1. At Standard Grade the Practical Abilities element is assessed numerically so numbers must be used to assign marks on techniques sheets and on investigation reports. Leaving a box blank does not provide evidence of assessment. If zero marks are awarded a zero should be entered on the evidence. On techniques sheets the mark is split between Safety, Manipulation and Write-up so numbers must be used. Placing a tick in each of these boxes is not sufficient.
2. D1 Titrations; key ability 9 is "measuring with precision appropriate to the technique". Guidance on Assessment of Techniques suggests a tolerance of 0.2cm^3 for concordant titres so the assessment of centres which accept a difference of 0.9cm^3 between "concordant" titres is not in line with national standards.
3. The best practice of internal moderation spreads expertise through a department in a centre and often solves assessment problems.