

2020 March Moderation - Report



Meeting Details

Meeting took place in:

South

Which meeting is this report for?

Science - Physics Level 4

Moderation Details for Calibration - Sample 1

Sample 1 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 2 = Overall, Element 2, Element 3, Element 4

Sample 1 - What rating (or ratings) has the group assigned this sample?

C2 overall: C-. C2E2: C-, C2E3: C, C2E4: C-/t+

Sample 1 - What evidence supports the rating (or ratings) the group has given?

E2: Very simplistic conclusions not really linked to their data. However, there was some attempt to draw connections between variables which met the descriptor of 'some validity', whilst not entirely valid or correct.

E3: Some attempt to identify errors, although these were superficial and not linked to results.

E4: The student identified that they could repeat the experiment, although the group was not convinced this was a valid improvement as there was no evidence of random errors in the data. There was a discussion of the meaning of a 'valid' improvement in line with the element descriptors for a C standard: is merely stating repetition without any consideration of the meaning of this.

Sample 1 - What evidence would you need to see in order to assign a higher rating (or ratings)?

E2: They would need a more detailed explanation of their data analysis process and this would need to be correct. For example, they needed more explanation of why they graphed it like this. Their conclusions would need to be entirely valid, rather than somewhat valid. The group also discussed that to move up to an A from a B a student would need to compare the theoretical and experimental values and possibly explore uncertainty in order to demonstrate critical analysis of their data.

E3: They would need to identify the errors that mattered and affected the results (rather than just a list of various errors which may have occurred) and in particular

they should be identifying the most significant source of error.

E4: For a solid C they should have identified an improvement that would actually have affected their results, rather than the shallow 'repetition' without consideration of what issues this addresses.

Sample 1 - Summary of group consensus with comments to element level if applicable.

Generally the group agreed this was a weak C standard. There was discussion of when the task was given and whether this was end point achievement or a progress task, given that we evaluate C2 all year long and we would expect students to improve. The consensus was that this task was very borderline C / t overall and thus other factors would likely come into play in the students final rating if this was the final assessment, such as providing an additional alternative task to allow them to demonstrate C standard better.

The element which had the least consensus was E4, due to the subjective interpretation of what a valid improvement is.

Sample 1 - What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

There was some discussion about the disconnection between the stimulus and the samples, and that this stimulus was not providing students with sufficient support to demonstrate a C standard properly. This C student made need additional scaffolding in order to better demonstrate their abilities.

Note: all comments / ratings in this section refer to Sample 1 as no space for Sample 1 space was provided in this form.

Moderation Details for Calibration - Sample 2

Sample 2 - Please identify each criterion being moderated and IF SELECTED the elements within that criterion

Criterion 2 = Overall, Element 2, Element 3, Element 4

Sample 2 - What rating (or ratings) has the group assigned this sample?

C2 overall: C. C2E2: C, C2E3: C+, C2E4: t

Sample 2 - What evidence supports the rating (or ratings) the group has given?

E2: The student drew a valid conclusion and they suggested a relationship between variables in the data. Their analysis was linked to data. This was deemed strong evidence for a C standard.

E3: The student discussed the difficulty of identifying the frequency where the standard wave occurs which was considered a valid limitation.

E4: None. No valid experimental improvements identified. Although the student discussed their errors in calculation and improved these, the group agreed that this does not constitute an improvement to the experimental design as per the element descriptor for a C standard. The erroneous calculations should not have been included in the report.

Sample 2 - What evidence would you need to see in order to assign a higher rating (or ratings)?

E2: The student needed to provide more explanation of their analysis / interpretation of the data. In particular, to move to a B they needed to provide quantitative analysis of data, such as a basic percentage error calculation and / or a comparison of the theoretical and experimental results and link this to the conclusion (i.e. due to the .

E3: The student needed more observations of the experiment in general in order to identify the errors -i.e. tension in the string likely not being constant. Significant errors / limitations were missed, and these would need to be identified for a B rating.

E4: The student would need to identify a valid improvement to the experimental design (rather than the analysis process).

Sample 2 - Summary of group consensus with comments to element level if applicable.

Generally consensus was good about this sample. Some elements were rated as a B by some teachers, but most of the group was in agreement that this was a C sample overall, especially following discussions.

Element 3 had the most variation, as some considered the error identification to be a B standard.

Sample 2 - What actions would you recommend for teachers to help the student attain a higher rating (or ratings)?

This student needed some more structure to the task instructions to support them in identifying errors and discussing improvements. Error analysis was discussed as being a key part of a high standard experimental report, and this student needed more support with how to do this.

Note: all comments / ratings in this section refer to Sample 1 as no space for Sample 1 space was provided in this form, pushing back all the numbers.

Planning for September Moderation 2020 - Statewide Samples

For all courses please nominate the criteria and elements (if desired) for moderation.

C8

State the name of the person who will be providing the samples for September moderation.

Julie Fryer

Sharing Resources

Please record any links to or details of resources that were shared, or describe any

Resources will continue to be shared via the Google Drive. All teachers present have access to this.

assessment strategies
that were discussed.

Course Support

Please provide details
of any future focus
and ways forward you
would like Years 9-12
Curriculum to
consider in relation to
this course:

There is particular concern in this course about disconnection between the moderation of marking which takes place at these meetings and the marking which takes place at the end of the year. This is particularly a problem as the usual Marking Coordinator for this subject is retired and thus not present at these meetings; this results in a disconnection between the standards and expectations which are applied internally and those applied in the external exam. We would really like Curriculum Services to consider liaising with TASC to organise for the Physics Marking Coordinator for 2020 (if not a current teacher) to be present at Moderation in September, especially as we will be moderating an external criteria.