

2020 March Moderation - Report



Meeting Details

Meeting took place in:

North

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 = Element 2, Element 3, Element 4

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

B, C, C, B, C, C, C, C - consensus of C overall

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

Recognise that sample 2 was better than sample 1.
 Better in element 4, but low in elements 2 & 3.
 Identify limitations but unable to suggest more than 1 improvement/analyse design.
 Didn't analyse data fully - unable to relate to purpose of experiment.

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

Element 4: Suggest multiple improvements.
 Element 2: Relate data to purpose of experiment.
 Linking back to theory and comparing to expected data.
 Accuracy of obtaining theoretical value.
 Errors from experimental design - use of pulley; more accurate to weigh each mass.
 Is the wavelength actually experimental or is it calculated from the frequency?
 Could also change the mass and compare the two results.

Sample 1 - Summary of group consensus with comments to

As above.

element level if applicable.

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

Unpacking the rubric with students ahead of the task.

Model the prac ahead of time so they can plot the graph and compare their results to expected results.

Give them some model answers.

Adjust the frequency until you get the first harmonic - use the frequency to record the data.

Moderation Details for Calibration - Sample 2

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

Criterion 2 = Element 2, Element 3, Element 4

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

A, B, B, B, A, B, B, B (most either A- or B+)

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

Element 2

Interpreted gradient; attempted to relate to nth harmonic; mentioned reviewed the work of other people but did not identify those people

Element 3

Issues with frequency generator identified; Issues with Tension; Raised issue of energy transferred to string from frequency generator; rather than generic human error - identified the errors (ie hard to read the dials, hard to distinguish standing waves); New calculations present in discussion

Element 4

New calculations present in discussion; reducing tension mentioned; attempt to link to real world

Sample 2 - What evidence would you need to see in order to assign a higher

Overall - have things that belong together, together; be concise;

Element 2

Show the data that they reviewed - in appendix;

rating (or ratings)?

Element 3

Reference to theory in discussion;

Element 4

Identify how the tension could be changed; suggest alternative experimental design;

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

As above

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

Perhaps allow students to design their own experiment; give them only the aim & apparatus and allow them to develop their own experiment; plenty of experience of designing their own experiment;

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 March moderation.

Hobart

Sharing Resources

Please record any links to or details of resources that were shared, or describe any assessment strategies that were discussed.

Oxford New Century Physics for QLD - Walden - excellent teacher resources.

Course Support

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

Formulae in course document and information sheet to be identical.

Fix errors instantly.

Give updated info sheet EARLY.

Information updated to be published prior to the school year commencing.