

The following report gives feedback to assist assessors with general issues and trends that have been identified during external moderation of the internal Earth and Space Science standards in 2018.

It does not clarify specific standards but provides further insights from moderation material viewed throughout the year.

## **Volume of Evidence Produced**

Some students produce an excessive volume of evidence. Students are not required to submit evidence beyond the criteria of the standard. It is appropriate for teachers to guide students to produce succinct evidence in response to the achievement criteria of the standard.

In Earth and Space Science, the context of the assessment can contribute to an increase in the volume of student evidence at all levels. Sometimes, presentations are well beyond the time expected. Work has been seen that demonstrates how students can produce concise, organised presentations that clearly show evidence of their ability in the suggested time frames. For example, students studying an estuarine environment concentrated on how Earth and Space Science affects an estuary (e.g. turbidity currents) rather than also giving extensive descriptions of the biology of estuarine environments.

## **Excellence at Level 3**

There is some inconsistency in awarding Excellence. When making assessor decisions regarding Excellence, consideration needs to be given to the overall quality of the evidence. This is critical when making a judgement at the Merit/Excellence boundary.

### **Investigation Standard**

At Level 3, where learners showed a justification for the investigation method and how it led to a valid and reliable investigation, key Excellence evidence was provided. Students who evaluated the investigation with links to the relevant Earth and Space Science correctly met the requirements of the standard.

### **Research Standard**

At level 3, students who reached Excellence evaluated the issue and its impact on individuals and society, and justified a personal response to the issue.

## **Group Work**

Group work is an acceptable form of assessment, if appropriate to the standard. When submitting group work for moderation, the teacher needs to ensure there is evidence that each student has met the standard.

The contribution of each student can be tracked and presented in a variety of ways, such as written record of teacher observation, the division of workload into clearly defined tasks, a student worklog or video diary, recordings of teacher/student conferences, etc.

Group work is an especially valid method for the Earth and Space Science Investigations standards: 91187 and 91410.

## **Integrated Assessment of Standards**

This refers to assessing multiple standards via one submission of student evidence. The assessment of standards may be integrated either within a subject or across subjects.

For external moderation, if the assessment is across subjects and the student evidence is physical, it can be sent on to the next subject moderator/s if required. If it is an online submission, the student evidence can be uploaded for each standard being moderated.

The integration of assessments in Earth and Space Science is a valid and fair form of assessment. Standards can be integrated from within the Earth and Space Science matrix or from other learning areas. Valid examples of this involved estuarine studies where ions were identified for Chemistry and turbidity currents were investigated for Earth and Space Science.

Where an integrated assessment was successfully used within Earth and Space Science and across learning areas, there was clear evidence of all aspects of the relevant Earth and Space Science standard(s).

## **Level 2 Investigation Standard 91187**

The best examples of investigations explained how their method gave reliable data and also linked the results, interpretation, and conclusion to the Earth and Space Science ideas that were relevant to their investigation.

## **Level 2 Research Standard 91188**

Students who successfully met the standard produced evidence that showed they were able to evaluate the validity of their chosen information by giving reasons related to Earth and Space Science. The students also justified a position related to the processed information and their conclusion.