



Department of Education, Sport and Culture

Rheynn Ynsee, Spoyrt as Cultoor

**Chief Executive Officer
Ronald Barr**

redacted
Education Improvement Service
Department of Education, Sport and Culture
Hamilton House, Peel Road, Douglas
Isle of Man, IM1 5EZ

Ref: redacted

Direct Dial No: redacted
Mobile: redacted
Website: www.gov.im
Email: redacted

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Moderation of Science Record 2018-19 Reissued September 2019.

Date – 1st May 2019

School – Marown

Moderators – redacted

Class teachers – redacted (Year 6) redacted (Year 2)

School Context:

The moderation exercise started with a meeting and discussion with the Headteacher, redacted and Science Co-ordinator, redacted who made the following relevant points:

- Science was included on the SIP in 2017 where the focus was the teaching of SC1.
- Two in-house Science Moderation Exercises have been carried out in March and April 2019 during staff meeting time. The Headteacher felt that these both went well and reported no immediate issues arising.
- There has been no recent in-house training for science teaching and learning although there is regular feedback from the science co-ordinators group.
- This is a one-form entry school with no mixed age classes. Science is taught by the class teachers.
- The school still 'loosely follows' the QCA science curriculum however science is taught through a thematic topic approach.
- The school uses the electronic assessment tracker which is shared the next teacher as part of the Cohort Information File. This (purple) file is used to ensure coverage of the curriculum and to inform

receiving teachers of topics already covered and specific science coverage.

- There is an expectation that there is a science investigation in all classes each half term to ensure opportunity for adequate SC1 coverage.
- Whilst transition takes place with QE2, at present there is no specific or consistent science input possibly due to the distance needed to travel and change of staffing at QE2.

Activities During Visit:

Book scrutiny, discussion with pupils, discussion with Science lead and Headteacher.

Evidence of in house moderation:

Verbal feedback was given as evidence of two recent in house science moderation exercises.

Science Training attended including Science Cos:

The science co-ordinator regularly feeds back to staff from Science Cos Group ensuring that best practice and any recent developments are shared. Eg: the Science Investigation Planning proformas have been shared with teachers and their future use is being considered.

Verbal feedback given:

This was shared with the Headteacher and Science Coordinator following the Moderation.

Moderation Focus:

Summative assessment of four pupils:

-2 currently assessed as Level 2a (Year 2)

-2 currently assessed as Level 4b/4a (Year 6).

Overall Comments:

- The science coordinator and Headteacher are keen to develop the teaching of science. The headteacher reported that staff are very receptive to suggestions for developing learning and their specific science teaching.
- The younger children were very enthusiastic when talking about science and showed a genuine interest in sharing their knowledge and understanding, using some accurate scientific vocabulary. Year 6 children were less enthusiastic and less able to articulate their science knowledge but were however really looking forward to science lessons at High School.

Evidence provided in relation to both Year 2 students:

There was not enough adequately assessed evidence provided to enable the moderators to accurately gauge that the attainment level given was secure. This was particularly so in SC1. However, the moderators agreed that the children are working within Level 2.

Work sampling provided evidence that:

- The science investigations were largely dependent upon classifying and sorting activities although there was emerging evidence of fair testing.
- The children's knowledge and understanding in some areas exceeded the evidence provided.
- Use of photographic evidence was of a whole class investigation that, without annotation, provided little evidence other than a record of the activity.
- There was a bias towards the teaching of SC2.
- Teacher feedback encouraged the children to reflect upon their learning but there was no evidence of this being acted upon or developed at the beginning of the next lesson.
- The evidence provided for both children was very similar therefore, there was little differentiation in terms of individual learning needs and interests. The children discussed examples of whole class teaching.
- Conversation with the students suggest that science investigations are generally lead, modelled and set-up by the teacher.

Individual Students:

Student 1 Year 2 ^{red}_{act}

Teacher Assessment: Level: 2a

Following discussions with ^r_e with regards to SC 1, 2, 3 and 4, there is a better level of knowledge and use and understanding of vocabulary than was evidenced in his work (e.g: ^{re}_{da} explained an investigation which was carried out as a direct result of norovirus which resulted in increased pupil absence. He was able to talk about the experiment, his findings and used some correct terminology.) This showed his ability to make links between real life situations and science. ^{re}_{da} was enthusiastic and showed real enjoyment in learning about animals (this reinforced the moderators understanding that there was more coverage of SC2 in relation to SC3 and SC4.) He could also explain the ramp experiment and fair testing using friction as a factor.

The Moderator disagreed with this level because there was not enough evidence to substantiate a secure Level 2a. However the moderators agreed that the children were working within level 2.

Student 2 Year 2 redacted
Teacher Assessment: Level: 2a

A was very quiet and happy to let redacted take the lead when talking about her learning in science.

The Moderator disagreed with this level because there was not enough evidence to substantiate a secure Level 2a. However the moderators agreed that the children were working within level 2.

Evidence provided in relation to both Year 6 students:

- The tracking documentation supplied was incomplete and was missing specific assessment criteria (11 statements not accounted for) therefore achieving a secure 4a would not be possible.
- Evidence for each child consisted of a single book that included all science learning from years 4, 5 and 6, with work separated into year groups.
- Whilst there was a range of SC2, SC3 and SC4 evidenced in the books, the moderators felt that there were missed opportunities to extend learning and little evidence of targeted feedback to consolidate or extend higher order thinking skills.
- Investigation types were largely limited to fair testing and basic classification.
- There was no evidence of a range of investigation types. (Eg: developing systems, investigating models or pattern seeking.)
- Learning appeared to be very teacher lead with little variation in written evidence.
- There were missed opportunities for hypothesising and concluding.

Student 3 Year 6 redacted
Teacher Assessment: Level 4b/4a

The Moderators disagreed with this level because there was a lack of evidence to demonstrate the required breadth and depth in learning.

Student 4 Year 6 redacted* as redacted was unavailable we talked to child 5 redacted
Teacher Assessment: Level 4a

The Moderators disagreed with this level because there was a lack of evidence to demonstrate the required breadth and depth in learning.

Strengths:

- The children were largely enthusiastic and happy to discuss/explain learning evidenced in science books.
- The school is using the science tracker and this is being passed through school with a system for ensuring coverage of topics taught.
- In house moderation is carried out.
- Science has been on the SIP
- There is a named science coordinator who is a science specialist.

Areas for development:

- To ensure that the objectives being assessed (SC1) are correct and copied in full to enable accuracy of assessment.
- To ensure full coverage of SC1, consider using a science planning proforma consistently so that by the end of Year 6, pupils are able to securely demonstrate correct investigation methodology and evaluation.
- To develop a range of experiments/investigations as a minimum requirement in all classes.
- Teacher planning to allow for opportunities for children to reflect upon previous learning outcomes and to extend/consolidate conceptual learning.
- To develop opportunities for children to design and carry out their own investigations across the school to enable greater individuality and opportunities for children to lead their own learning. (develop autonomy)

A further visit is offered by the moderators to help the school address some of the above issues

Signed (Moderator) –

Date –

Signed – (HT)

Date -