



Department of Education, Sport and Culture

Rheynn Ynsee, Spoyrt as Cultoor

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Moderation of Science Record 2017-18

Date – Wednesday 2nd May 2018

School

Michael Primary School; Headteacher: redacted

Moderators

redacted

School Context

The school follows the International Primary Years Curriculum (IPC) for all of its subjects. Science is taught in a topic-based way and planned using learning objectives from the IPC, with assessment using the Science Strands. IPC topics are very cross-curricular, particularly making links with Maths and Literacy. Students have significant independence and are involved in choosing which topics they complete, which are non-prescriptive and wide-ranging, examples being 'Mission to Mars' and 'Fairground'. The school feels that this topic-based approach lends itself to a mixed year group setting. As a result, students are highly engaged with science and it is well integrated.

Science is taught by classroom teachers are there are currently three mixed year-group classes – one Year 1/2 class and one 2/3 and one 5/6. There are no science specialist teachers at the school. Assessment in science is through observations and students' books, however some topics have other endpoints and the school had a very successful science fair last

year in which students presented their work. Where necessary, in-house science moderation occurs in mixed year-groups. This occurs in an informal way and teachers will meet and discuss students and activities.

Science is not currently on the SIP, However, attainment at Key Stage 1 across all core areas is and so this will include Science. The Headteacher does not have any concerns about science as trends in attainment for Key Stage 1 and 2 are stable.

The school does not currently have a Science co-ordinator role. This function is carried out jointly by the Headteacher and Deputy Headteacher redacted No one has recently attended Science Cos meetings, although this is something that is planned for the future.

Activities During Visit

Interview with the headteacher. Review of work from pupils. The moderators also interviewed pupils from Y2 and Y6 and talked to them about their work.

Verbal feedback given

Yes, to Headteacher.

Moderation Focus

Two pupils assessed as achieving 2a and two pupils assessed as achieving 4a. The focus was on overall assessment.

Overall Comments

The school was welcoming and there was a room and refreshments provided for the moderators. The pupils were from Years 2 and 6 and all were polite and responsive and all enjoyed science. It would have been preferable to have had students from other years, as opposed to two from Years 2 and 6. Michael is a small school, however, and this was not possible on this visit. Everything was well organised and the moderation session went smoothly.

Moderators were provided with books that had been prepared for the visit, which contained examples of work used to assess students; some was original work and some was photocopied from topic books. This made it harder to see the context of some of the work and the flow and progress of the learning in science. Topic and exercise books were requested and then also provided, which were extremely helpful. Each student had a copy

of the Science Strands tracker and this is being well-used by teachers to assess students levels.

It became evident during the moderation that when calculating the Year 2 students' overall levels that the necessary weighting had not been given to the Sc1 strands, despite using the science tracker which should give double weighting to Sc 1. This issue is currently being investigated to ascertain why not.

Individual Students:

Student 1 Year 2

Level: 2a (Sc1 2b; Sc2 2c; Sc3/4 3c)

The Moderator agreed with this level because:

There were a range of different activities covering science objectives in a variety of different lesson and topic contexts. Post-it notes were used to identify for moderators where the necessary skills had been met. Not all work was dated and there was no evidence of science-specific learning objectives being shared with the student. There was no evidence of written teacher feedback or next steps. When speaking to this student it became clear that they are often given verbal feedback, such as "you're doing well". There was evidence of excellent use of ICT and practical activities, including use of logits for data capturing subsequent presentation.

Student 2 Year 2

Level: 2a (Sc1 2b; Sc2 2c; Sc3/4 3c)

The Moderator agreed with this level because:

This student is in the same class as student 1 and so had completed the same activities and moderators were provided with similar evidence. This student's worked also showed evidence of peer-assessment and feedback and some next steps were provided by the teacher.

NB. As mentioned above, although moderators agreed with the individual Sc1-4 levels for both of these students, they felt that their overall level would have been lower (2b), if the necessary weighting were given to the Sc1 skills.

Student 3 Year 6

Level: 4a (Sc1 4a; Sc2 5c; Sc3 4a; Sc4 4a)

The Moderator agreed with this level because:

There were a range of different activities covering science objectives in a variety of different lesson and topic contexts. There was evidence of a spiral curriculum, as electricity and lifecycles are topics also taught in Year 2, albeit at a lower level. There was a significant focus on Sc1 skills and evidence of multiple Sc1 investigations in this student's work. The student exhibited good data handling skills and had been given lots of opportunity for demonstrating this, along with data presentation (graphs and tables). ICT was regularly well-used. There was also evidence of specific scientific apparatus being used, such as glassware and test tubes. This student also told us that they regularly borrowed and used scientific equipment. Moderators noted that the Science Strands had been used as learning objectives in some lessons. There was signed and dated evidence of moderation in this book, although it was not clear what level had been agreed on.

Student 4 Year 6

Level: 4a (Sc1 4a; Sc2 5c; Sc3 4a; Sc4 4a)

The Moderator agreed with this level because:

This student is in the same class as student 3 and so had completed the same activities and moderators were provided with similar evidence.

Neither of the Year 6 students' work had evidence of written feedback or next steps and there were no opportunities seen in which students could have achieved level 5 skills. When interviewed, students 3 and 4 both said that their planners were sometimes used for comments and feedback and that they received verbal feedback sometimes on their progress.

Both Year 6 students commented that they really enjoyed science, particularly working in groups and on investigations and they felt they were given plenty of autonomy and independence.

All students told us about the science fair and science week activities that they had taken part in. This was a whole-school event that involved mixed-aged (e.g. Years 2 and 4) groups undertaking Sc1 style investigations and practical activities.

Strengths:

- It is clear that science is one of the school's strengths. All students were enthusiastic and engaged in the learning of science.

- The curriculum is interesting and progressive and the students have access to excellent practical and ICT resources.
- The IPC curriculum lends itself well to cross-curricular links and high levels of independent learning.
- There is a structure for science across the school and a curriculum that enables mixed-age teaching.
- The school's science fair is a significant strength and was enjoyed by all students as well as being an excellent learning opportunity.
- The Science Strands document and spreadsheet are used consistently well to monitor students' progress and assess their working level.
- There is evidence to show that staff are teaching some of the higher level skills needed to achieve well in Sc1 and that staff are trying to improve the children's skills in data handling.

Areas for development:

- Better use of effective feedback, whether this be verbal or written, would allow students to know the science level they are currently working at and, more importantly, what they need to do improve their level.
- Greater consistency sharing learning and assessment objectives with students, as well as giving an indication whether a learning objective has been met or not, would also help show progression and allow children to see their next steps in learning.
- To achieve success with demonstrating some of the more complex skills at each level of Sc1, teachers need to enable pupils to have more opportunities to create questions, develop ideas, scrutinize and recognize inconsistencies in data, identify patterns and anomalies, and draw conclusions and give reasons.
- The use of science-specific exercise books should be considered, rather than science being in topic books. This may allow students more of a context for their science work and allow better monitoring of progress.

Signed (Moderator) –

Date –

Signed – (HT)

Date -

