

Review feedback (R23 Autumn)

School: 158232163 Cambo First School

Science Leader at school: Julia Wilson and Paula Cummings

PSQM Hub Leader: Helen Spring

Quality Mark submitted: **PSQM Gilt**

Reviewer: Naomi Hiscock

Strand	Aim and PSQM Criteria	Observations
SCIENCE LEADERSHIP AIM: Science subject leadership has been strengthened and developed. Science is valued and improved through embedded and sustained processes for subject leadership.		
SLa	There is a clear vision for science that is well established and consistently implemented through principles for teaching and learning which are regularly reviewed by the whole school community.	Reviewing the evidence across the whole portfolio, it is clear how the principles are guiding the planning which is having a good impact on the pupils' learning. The development and use of the outdoor space and links to the local community have enhanced the pupils' real life learning experiences and their engagement in wider environments. Teachers are now providing more opportunities for the pupils to lead their enquiry work which has increased the pupil's enthusiasm and their curiosity.
SLb	There is strategic support for subject leadership which is well established and reciprocal and includes: <ul style="list-style-type: none"> sustained professional learning for subject leader, including engagement with the primary science education community the subject leader(s) contributing to whole school strategic planning allocation of time and resources linked to strategic priorities. 	The subject leaders have worked with the other schools across the Morpeth Partnership in order to develop core documents to ensure consistency and progression across all Key Stages. In the past the subject leaders have developed their skills in a range of ways, but after Covid had not been able to return to attending network meetings. Being part of the new network for small schools will provide the important opportunity to work with and share ideas with leaders in other similar schools, as has already happened to moderate the workings scientifically skills.

SLc	There is a rigorous monitoring and improvement cycle using evidence and views from all stakeholders and sources to shape development in science.	New strategies that have been implemented have been effectively monitored using a rigorous monitoring programme. This has involved gathering evidence from books, planning and observations to ensure consistency across the classes with a particular focus on the range of teaching and assessment strategies that are used. Team teaching has been added as part of the monitoring process which teachers have found to be effective and supportive. It is excellent that the governors are also included in the monitoring cycle.
TEACHING AIM: Science teaching has been strengthened and developed. Subject leadership responds to development needs in science teaching.		
Ta	There is provision and signposting of a sustained programme of internal or external professional development and support with which staff engage.	With all the teachers sharing the science leadership there has always been good ongoing CPD to support good practice. This year CPD has focused on adapting planning to give the children more independence with enquiry work. Pupils are now given the opportunity to direct their learning by asking questions and deciding for themselves how to gather data to answer them. Teachers are also now tweaking the planning to align with the Primary Science Capital Teaching Approach of starting with the interests and experiences of the pupils.
Tb	Teachers use and evaluate a developing and extending range of evidence-based strategies to challenge and support the learning needs of all children.	The teachers reviewed the teaching strategies used and whilst there was a good range they felt that this could be widened. Teachers are now using a wide range of strategies that not only provide variety for the pupils but also ensure that pupils of all ages and abilities are supported and challenged, for example. the use of modelling and drama to support pupils that find writing more difficult and the careful planning of higher order questions to challenge the more able to think more deeply.
Tc	Resources are systematically audited and acquired (purchased or borrowed/sourced from outside agencies) so that children can regularly and safely use a wide range of appropriate practical and digital resources, information texts and the outdoor environment.	Auditing and maintenance of resources continues to be effective. The school secured funding to develop the outdoor space and all staff have received training on using the space which has resulted in the children learning more of their science outdoors. This has had a big impact on the learning of the children as more children are now meeting the expectations. An app for gathering data has been identified and trialled. It will be useful to consider where use of this can be built into enquiry work. Children are now reading more science texts as a result of taking part in the PSTT competition and including science books monthly in the 'book of the week'.
LEARNING AIM: Science learning has been strengthened and developed. Subject leadership develops and evaluates teachers' practice.		
La	Children develop independence in the full range of enquiry types, using scientific enquiry skills appropriately to answer scientific questions about the world around them.	The teachers are aware of the enquiry types and plan to include these across the year. The spread of each type of enquiry has been reviewed and plans have been adapted to address gaps. The children are developing their ability to identify the enquiry types they are using which means they will be in a strong position when they move on to their next school to identify the type of enquiry they will need to use to answer a question. Teachers are also aware of the need to explicitly teach the skills, but this feels like an area that needs to be developed further next year.


Lb	There is a school-wide commitment to continually improving assessment practice and processes for formative, summative and statutory assessment, through regular evaluation which ensures that they reflect the shared understanding of the purposes of assessment in science and current best practice.	Using the TAPS pyramid allowed the teachers to identify the need to develop 'pupil involvement' and 'responsive teaching'. This has been considered when planning and pupils are given more opportunities to review their work which has given them a better understanding of their learning. Teachers are using a wider range of strategies to identify gaps in learning, misconceptions and next steps which has helped to personalise the learning for the pupils. As summative judgements are made collectively, this means that they are robust and consistent across the school.
Lc	The whole-school community supports and promotes initiatives that encourage all children to think that science is relevant and important to their lives, now and in the future	The teachers are now tweaking lessons in line with the Primary Science Capital Teaching Approach to personalise and localise activities. There are lovely examples in the portfolio of the links to the local community such as the local farming community and the National Trust property, highlighting the science around them. They have also engaged with people that use science in their work such as the parent/governor doctor and in activities to support them to learn about protection of the environment.

WIDER OPPORTUNITES AIM: Science has been enriched.
Children's experiences of science are enriched.

WOa	Whole-school planning links science to other areas of learning, including English and mathematics, and to whole-school initiatives.	There were links in place between science and other subjects, but these were not being fully utilised. These links are being reviewed in order to maximise the impact on each subject. It is important to consider what Maths skills the children have so that they are not expected to do something in science that they do not know how to do. This document may be useful, although it, of course, will not relate to the school's curriculum as it is based on the National Curriculum. This document may help to identify further links between science and the foundation subjects.
WOb	There is regular and purposeful involvement in a range of initiatives supported by other organisations and topical science activities, both in school and with their families	The Science Development Log and portfolio show that a good number of enrichment activities are provided for the children both in terms of visits and visitors. There have been two positive developments this year. The first being the stronger links with parents through the home learning activities. The second being the reestablishment of the science club that has benefitted all pupils. The new links made with the local schools and the international school should hopefully provide further enrichment to the curriculum in the future.

Final Questions – comment	Going through the PSQM process has put the spotlight back on science. Teachers have worked together to adapt planning to ensure full coverage of working scientifically, embed a wider range of teaching and assessment strategies and to monitor the impact of these developments. Pupils are now all meeting expectations and are able to talk more confidently about their learning.
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Overall comment	The small staff team has worked together to make changes which have made a big impact on the learning of the pupils. The submission shows that this is further developing the successful work undertaken while previously participating in PSQM and rightly deserves PSQM Gilt.
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Congratulations to you all on achieving the Primary Science Quality Mark Gilt. Science is clearly going from strength to strength.

