

## Review feedback (R23 Autumn)

School: 158144872 William Stockton Primary School

Science Leader at school: Becky Williams and Claire Beamish

PSQM Hub Leader: Neil Phillipson


Quality Mark submitted: **PSQM Gilt**

Reviewer: Linda Atherton

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.	<p>The science vision and principles have been reviewed and there is good evidence that these have ensured that science is high profile. To make sure that there is consistency these are on displays, website, newsletters and promoted on social media. The principles are child friendly and to support engagement with the children have been encouraged to identify with science mascots. Weekly rosettes are also an excellent way of encouraging children to engage with science learning.</p> <p>It will be important to continue to review the principles on a regular basis and perhaps include the wider community and governors to ensure that they remain real and relevant.</p>
SLb	<p>There is strategic support for subject leadership which is well established and reciprocal and includes:</p> <ul style="list-style-type: none"> <li>sustained professional learning for subject leader, including engagement with the primary science education community</li> <li>the subject leader(s) contributing to whole school strategic planning</li> <li>allocation of time and resources linked to strategic priorities.</li> </ul>	<p>There is very good evidence of a strategic approach to developing science and keeping it real and relevant. Making high quality resources available for science investigative work has been a priority. This has included relevant texts and opportunities for enrichment. The log indicates that the science leader (SL) has been initiative-taking in engaging with relevant CPD such as supporting children with SEND and EAL and disseminating this to other teachers in a meaningful manner. It is pleasing to note that there are plans to develop CPD through the secondary school. Additionally, there are regular meetings with SLT.</p> <p>Next steps could be for the SL to engage with local science network as this would be a great way of sharing science ideas and strategies that have an impact on teaching and learning.</p>

<b>SLc</b>	There is a rigorous monitoring and improvement cycle using evidence and views from all stakeholders and sources to shape development in science.	The school has a bespoke curriculum and have gained evidence of progress from pupil voice, book looks and observations. The use of Precision Teach allow teachers to access information about progress and then identify next steps. The SL is also using hashtags to monitor through social media curriculum delivery. In the moment marking also supports progress. Additionally, the use of a Padlet supports this and will continue post PSQM.
TEACHING AIM: Science teaching has been strengthened and developed. Subject leadership responds to development needs in science teaching.		
<b>Ta</b>	There is provision and signposting of a sustained programme of internal or external professional development and support with which staff engage.	Regular staff meetings provide an opportunity for regular updates and a variety of CPD which has included Explorify, assessment, vocabulary, and consistency. Experts from the community have also supported teachers to become more secure in teaching aspects such as pollination. Moreover, varied CPD has increased the confidence of teachers in creating rich learning opportunities.  Moving forward there are plans to target CPD in relation to key enquiry type. The school might also find the following CPD useful in further developing staff's science knowledge. <a href="#">Primary Resources Science   Reach Out CPD</a>
<b>Tb</b>	Teachers use and evaluate a developing and extending range of evidence-based strategies to challenge and support the learning needs of all children.	There has been a drive to improve vocabulary and the use of stem sentences has supported this. The teachers have also engaged with Explorify. Additionally, there is evidence of the use of practical and visual representations and science planners. It would have been interesting to have learnt more about what other successful strategies are used to develop the children thinking and independence. Next steps to extend strategies might be to explore <a href="#">The Ogden Trust: supporting physics education &amp; engagement</a> and <a href="#">Home - Primary Science Teaching Trust (psst.org.uk)</a>
<b>Tc</b>	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.	Resources are systematically audited and there has been a great emphasis on developing resources which challenge and extend children's scientific thinking. The staff embrace the outdoors as a rich environment to develop science. There is also a range of information texts and technology such as micro bits to extend thinking. The SL is also being proactive in linking with secondary schools to extend the range of resources. Perhaps next steps could include children becoming science technicians to help look after the resources. This would also make them aware of what equipment is available for them to work independently.
LEARNING AIM: Science learning has been strengthened and developed. Subject leadership develops and evaluates teachers' practice.		
<b>La</b>	Children develop independence in the full range of enquiry types, using scientific enquiry skills appropriately to answer scientific questions about the world around them.	Teachers have been upskilled in their teaching of different types of enquiries. Displays on walls are also linked to enquiry types. There is good evidence of different types of enquiries being explored by the children; the use of science planners has supported children when planning an investigation. There is also a drive to ensure that the needs of SEN and EAL are considered. Children are also encouraged to identify science skills that they have used in an investigation. It would have been interesting to discover how children generate their own questions to explore, and this is perhaps an area for development. Next steps might also include the generation a wonder wall or cupboard alongside their visitors to support this.

<b>Lb</b>	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.	The SL has attended CPD to support the development of assessment at the school and PLAN assessment is being used to guide teachers in making judgements and support moderation. Insight and CHAMPS are being utilised to support progression. Alongside these, children are engaged in identifying the scientific skills and their understanding by using knowledge maps. However, there is little detail on the actual effective AFL strategies being deployed apart from in the moment marking. The school might now want to explore what are the effective strategies being used in science and explore TAPS to further develop the AFL skills and assessment techniques. <a href="http://psts.org.uk">TAPS - Primary Science Teaching Trust (psts.org.uk)</a>
<b>Lc</b>	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	It is evident that teachers are encouraged to use resources that are real and relevant to children. Links to environmental issues have inspired children to become involved with key issues that could affect them. Visitors and trips play a key part in this commitment. The science week also inspired children to want to know more about scientists and possible science careers. The following resource might further support this <a href="https://psts.org.uk/unique-resources/a-scientist-just-like-me/">https://psts.org.uk/unique-resources/a-scientist-just-like-me/</a>
WIDER OPPORTUNITES AIM: Science has been enriched. Children's experiences of science are enriched.		
<b>WOa</b>	Whole-school planning links science to other areas of learning, including English and mathematics, and to whole-school initiatives.	There are strong links planned in the curriculum with English and Maths. There is also good evidence that there are connections with STEAM and in particular the art festival has certainly ignited a passion in children to link art and science. This is definitely an area that is developing and potential strong links across the curriculum are being made.
<b>WOb</b>	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	There has been a drive to make science a very practical subject and STEM activities have supported this. Visitors, trips, and Twig science reporter have helped in making science real and relevant.  Stay and science has encouraged links with families. The school engaged in a science week and an art festival.  Perhaps the school could now explore how regular science clubs could build on this and engage with initiatives such as RSPB Bird Watch and Science Share events.
<b>Final Questions – comment</b>	There has certainly been a dynamic move to make science real and relevant.	
<b>Additional Points</b>	There are some lovely examples in the portfolio of science taking place. However, there are some missed opportunities to exemplify how children work independently in science.	

<b>Overall comment</b>	PSQM has certainly been a catalyst to encourage the children to think of science as real and relevant to them. The school should be congratulated on their enthusiasm in making science at the heart of the curriculum. It is obvious that science is being led by a very enthusiastic and proactive teacher who is excited about science and is willing to pass this excitement on to others in the school. There are some encouraging post PSQM actions which indicate that the school will continue to develop/embed science teaching and learning and further develop the curiosity and inquisitiveness of their young scientists. Well done.
	Reviewer's signature 

**Congratulations to you all on achieving the Primary Science Quality Mark Gilt. Science is clearly going from strength to strength.**

