



Reviewer's feedback

School: **10545 St Peters Primary School**

Science Leader at school: **Vicki Brown**

PSQM Hub Leader: **Michelle Yates**

Quality Mark submitted: **PSQM**

Reviewer: **Jane Ferguson**

Criteria	Indicator	Observations
SL1	There is a clear vision for the teaching and learning of science	The school has developed a clear and detailed set of principles for science, which are clearly being embedded throughout the school. I like the knowledge organisers – do these also include the working scientifically skills? It is good to see that these are also written in pupil voice, and that pupils are involved in the review and evaluation of the principles.
SL2	There is a shared understanding of the importance and value of science	Parent workshops, CPD, displays, and the consistent use of the principles in planning have clearly raised the profile of science, and led to a shared understanding of its importance and value. The “Shine Through Science” headline has been a great way to highlight the school’s focus this year.
SL3	There are appropriate and active goals for developing science	School Leaders have created appropriate goals for science, with a clear calendar and timeline for its development; the evidence of continuous and active development is clear in the portfolio. The HT has held regular supportive meetings with the SL. Governors have been involved through reports and learning walks, and support has been given by the HT throughout the year. Will science continue to be on the School Development Plan next year?
SL4	There is a commitment to the professional development of subject leadership in science	The SL’s NPSQL project was to raise the profile of science across school and develop the quality of investigation work. Subject leadership training, working on target setting and action planning has also led to a review of assessment procedures, and helped the SL to identify clear targets for improvement. The portfolio demonstrates the impact of this CPD in driving improvements in all areas of science. It is good to see that the SL also participates in local cluster meetings. To further develop her own knowledge and understanding of science, it might be a good idea to look at the National STEM Centre (York) courses,

		which have generous bursaries to support the costs. They are always excellent and inspiring.
SL5	There are monitoring processes to inform the development of science teaching and learning	<p>The SL has described a regular programme of lesson observations, work scrutiny, staff and pupil questionnaires in place. Feedback has been given both individually and is summarised and reported to the SLT. The NQT has also had specific mentoring.</p> <p>Through her monitoring, the SL has identified that assessment data needs analysing further, to look at the breakdown of vulnerable groups and gifted and talented, and to enable targeted interventions to occur. Also, to look at the challenge for the more able. She plans to address weaker areas through CPD. She has also identified that pupil self-assessment needs to become a more engrained part of teaching and learning within science. These are very appropriate areas for future developments.</p>
T1	There is engagement with professional development to improve science teaching and learning	<p>The CPD in school has developed ideas for 'working scientifically' and increased enthusiasm for science learning throughout the school, which is evident throughout the portfolio. School Direct trainees have also been provided with science specific CPD. The impact has been monitored by the SL. The post-it planning investigation sheets have enabled children to develop their working scientifically skills for enquiry planning.</p> <p>Next steps might be to look at the free on-line resource, Reach-Out CPD, which could target specific knowledge and misconceptions for teachers and build further confidence.</p>
T2	There is a range of effective strategies for teaching and learning science which challenge and support the learning needs of all children	<p>A wide variety of strategies for teaching science are evident throughout the portfolio, including hooks into learning, video links, music, objects and physical games that engage the children. The portfolio clearly shows how this has impacted on children's learning.</p> <p>Have you also considered using Active Assessment/Drama?</p>
T3	There is range of up-to-date, quality resources for teaching and learning science which are used regularly and safely	<p>A wide range of high-quality resources, that meets the needs of the curriculum are well organised; you have audited the resources to ensure that staff have what they need. Good to see a wide range of IT resources in use too.</p> <p>You might like to think about "employing" pupil "technicians" who could help with the responsibility of looking after equipment. This is always very popular with pupils and helps to develop their science capital as well as enabling them to develop responsibility.</p> <p>Although you mention safety goggles and procedures, you haven't mentioned risk assessments, or explained how teachers are helped to keep children safe in their investigations. The Be Safe resources from CLEAPSS are a helpful resource for this, and might be a useful next step.</p>

L1	There is a shared understanding of the purpose and process of science enquiry	You have achieved a real transformation in science learning to an enquiry focused approach and it is a delight to see children's innate scientific curiosity being so well supported. It is good to see the investigation sheets being used so that children can design their own investigations. It seems that investigations are more structured by the staff at the moment, and the SL has correctly identified that it would be good if children could design investigations led by their own questions (at least once per half term); also to be able to choose their own equipment and resources.
L2	There is a shared understanding of the purposes of science assessment and current best practice	The school are continuing to develop their assessment procedures for science. Teachers seem to have a consistent view of the purposes of science assessment in their school, but this does seem to be quite knowledge based, leading to summative half-termly and annual data summaries. It is useful for the SL to have that overview, and to identify what is working well and what needs development. Formative assessment strategies are not really clear in the portfolio, and I would have liked to have seen more evidence of how this works; how do children understand how to improve their own work and do they know their next steps for becoming more independent? The TAPs activity might help you to identify what is working well, and what your future needs might be in assessment.
L3	There is a commitment to developing all children's science capital	Children are clearly developing their science capital through science club, visits from professionals in STEM careers, events and the curriculum. Home learning tasks and parent workshops are also contributing to this. It would be worth, in the future, finding out whether there are parents who are using science in their work and whether they would be prepared to come in and share with the children. Also, to identify which children might be disadvantaged in this area, so you can offer targeted support for them.
WO1	There are appropriate links between science and other learning	Science is linked to other subjects through topics, and also to whole-school initiatives like the healthy minds initiative. There are also links to maths and literacy. Next steps might be to consider how science links formally to other subjects, and to look at the progression. It might be useful to look at the new Ofsted framework, which places more importance on curriculum design – intent, implementation and impact, and which also looks at the school's idea of progression.
WO2	There are appropriate links with families, other schools, communities and outside organisations to enrich science learning	The school has built appropriate links with families through the science blog on the website, through home-learning tasks and parent workshops. They have also worked with other schools and a variety of visits and visitors to enrich science learning and celebrate achievement in science. Next steps might be to make links with the local secondary school, to share resources and to identify what your school is doing well in science, and what any gaps or misconceptions might be in relation to transition to the next phase.
Final Questions		It is good to see that you have become a reflective and more confident practitioner through your PSQM journey.

Overall comment	Thank you for letting me share your PSQM year. This is a strong submission, well done.
This submission meets the criteria for PSQM	<p>Reviewer's signature and date</p>  <p style="text-align: right;">22nd April 2019</p> <p>Many congratulations to the whole school team on the achievement of the Primary Science Quality Mark. You have clearly raised the profile of science this year and I am sure it will continue to go from strength to strength.</p>  <p>Helen Sizer Deputy Director: Primary Science Quality Mark</p>
Additional Points	<p>I suggest that you use the TAPs assessment activity to identify future development in assessment.</p> <p>For CPD in all areas, I recommend the STEM Centre in York; they link primary science to different subject areas, as well as offering CPD for science subject leaders, NQTs and TAs. Their courses are inspirational, and offer very generous bursaries.</p>