

Review feedback (R23 Spring)

School: 158129790 Redhill Primary Academy

Science Leader at school: Tom Hodgkison

PSQM Hub Leader: Jenny Watson

Quality Mark submitted: **PSQM Outreach**

Reviewer: Jo Montgomery


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.	Portfolio evidence shows how the revised principles have impacted on teaching in learning, in particular planning opportunities for purposeful revisiting of topics and building on prior knowledge. Staff voice shows that this is improving planning and progression, and pupil voice reveals children are making links with their prior learning and going into greater depth. Moving forwards, it would be interesting to evaluate how these principles are being displayed, used and shared, and the impact these are having as they become embedded.
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. 	It is clear that the focus placed on science can be seen by its prominence in the SDP, support from SLT for SL outreach activities, renewed enthusiasm of teaching staff, development opportunities and staff meeting time. There is clear evidence of the impact of the sustained professional learning and CPD attended by the SL this year, particularly the network meetings, PSTT, science capital, RSC and IOP opportunities, which have directly fed back into supporting colleagues to strengthen and develop practice. It would be interesting to see the SL further contributing to whole school strategic planning.

SLc	There is a rigorous monitoring and improvement cycle using evidence and views from all stakeholders and sources to shape development in science.	Through teacher voice and book looks, you have developed a clear idea of teaching and learning across the school and this is used to inform actions to support individuals and year groups. Children's voices have been listened to; their ideas and interest have been considered as seen in a variety of opportunities for children to ask and investigate their own questions and the including of hedgehog houses in the school grounds and child-led extension investigations.
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.	An initial appraisal of teaching is used to good effect to identify a range of CPD – from individual mentoring, targeted advice and strategies, team planning and teaching, support, and whole school CPD for staff, including support for ECTS, and consequently staff are confident in what and how topics should be taught.
Tb	Teachers use and evaluate a developing and extending range of evidence-based strategies to challenge and support the learning needs of all children.	A range of teaching strategies are used, including enquiry, exploration, models, first hand experiences and problem solving. Concept cartoons and Explorify are regularly used to support teaching and learning. It will be interesting to see how plans evolve for developing role play/drama and use of construction models mentioned in the A2R planner but not shown in the portfolio or post PSQM needs and actions. It may be interesting to evaluate strategies used to challenge and support all learners.
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.	Resources are well organised and maintained, colour coded by year group making it easy for teachers to plan for and carry out appropriate enquiries. Increased use of digital resources, such as data loggers, loan microscopes and birdbox cameras has provided engaging contexts and opportunities for children's science learning. There is provision of a range of information texts in each classroom. It would be interesting to see how these are used to support learning. There is good support in place for staff to consider safety implications. Increased use of outdoor learning has supported pupil voice to address children's concern for the environment, and teacher subject knowledge has been enhanced.
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 variety of enquiry examples in children's books in the portfolio shows how children are developing enquiry skills, which is impacting on their understanding of the practices of science. Skills are explicitly taught and practised and applied, with opportunities for discussing how to carry out an enquiry and increasing independence is supported as children progress through the school. It is clear from the many opportunities for hands-on learning that children's innate scientific curiosity is being well supported.

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.	There is clear and robust assessment practice which is reliable and fit for purpose, in both formative assessment, which informs teachers and future planning and in summative assessments including disciplinary skills. A wide range of best practice AfL strategies are used for quality teaching and to identify misconceptions; targeted activities are used to address these. Introducing the TAPS focused assessment tasks has supported teachers in focusing on working scientifically skills, helping children to develop and apply these skills. The use of PLAN matrices and exemplification documents has supported moderation and teacher judgement from a wide range of assessment opportunities.
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	It is interesting to see how the use of Lottie dolls role models was used to develop children's science capital, alongside the use of PSTT's A Scientist Just Like Me resources and this has begun to have an impact on children's stereotyped perceptions of science and scientists. Use of the NUSTEM resources and a range of science visitors to school is beginning to broaden children's perceptions of STEM careers and I would like to see post PSQM plans to further develop children's science capital in a variety of ways, including some small tweaks to lesson planning as suggested in the Primary Science Capital teaching Approach. https://www.ucl.ac.uk/ioe/departments-and-centres/departments/education-practice-and-society/stem-participation-social-justice-research/primary-science-capital-project
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.	The links between science and literacy can be seen though opportunities for oracy and writing based on science topics. There are some links between science and history and sustainability forms part of the wider curriculum. Purposeful cross-curricular links provide context for key concepts and allow children to revisit, make links and embed learning. It would be interesting to see more explicit links made and collaborative mapping and planning between subject leads particularly looking at maths skills in science.
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	A wide range of wider enrichment opportunities are provided across the school to enhance children's science learning including STEM clubs, competitions, home learning links, trips, visitors, projects, and opportunities to apply learning in real world contexts. Parents have clearly become more involved in children's science learning as seen through links with parents with STEM jobs supporting teaching and learning in school, and communication is maintained through social media use. The science selfie competition was particularly impactful in encouraging family engagement in science activities.
OUTREACH AIM: OTHER SCHOOLS There is a commitment to leading professional development and learning in science in other schools. Science is valued and improved in other schools		
Other schools a	The subject leader(s) regularly shares good practice beyond their own school.	There is sustained sharing of best practice with other schools and colleagues, through ITT, network meetings and supporting local schools with staff meetings and CPD. RSC funding was used to good effect to support colleagues from other schools on progression in plants topics.
Other schools b	Science outreach initiatives are planned and evaluated.	The SL has worked with another school as a SLE to support progression and planning in both substantive and disciplinary skills. Reflections show that this has developed leadership skills as well as supporting other schools.

Other schools c	There are effective cross-phase links within and/or between schools.	There has been work with local secondary schools to collaboratively look at transition from KS2 to KS3.
OUTREACH AIM C: There is a commitment to sharing expertise in science teaching and learning beyond the immediate community: Science is valued and improved in the wider community :		
Wider community a	People in industry are trained to work in schools.	
Wider Community b	Reciprocal global links are developed.	Existing links with a school in Kenya were further developed, including collaborative science projects observing birds, planting and growing seeds and investigating light and shadows. This has led to inspiring contexts to develop understanding, ideas and discussions for children in both schools.
Wider community c	There is collaboration with colleagues in HE to develop Initial Teacher Training.	The SL works with the MAT to deliver science ITT.
Wider community d	Expertise is shared through: <ul style="list-style-type: none"> ○ writing for journals e.g. ASE, Ogden Trust, PSTT, TES; ○ regular online blogging or widely-available social media posts; ○ contributions to published resources; ○ conferences presentations; ○ participation in policy-level activity. 	

Final Questions – comment	It is great to see a renewed focus on science – even in the most enthusiastic of schools there are pulls in many directions. It is particularly pleasing to read that teachers’ confidence and interest has grown and they are proactively developing and learning – and wonderful to read that plants topics are being valued.
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Overall comment	It is clear that the profile of science is high at Redhill, and that quality teaching and learning is happening across the school, with plentiful opportunities for hands-on investigation, enrichment and making real-world links. The principles are embedded and weave through science provision and it is evident that children (and staff) are “excited by and enthusiastic about our learning” - and this is extended to other schools through the Outreach work. Well done!
	Reviewer’s signature 

Congratulations to you all on achieving the Primary Science Quality Mark Outreach. We look forward to seeing how you continue to nurture and inspire science in your own school and beyond.

PSQM

Primary Science
Quality Mark

PSQM Outreach

Valid 2024 – 2027