Reviewer's feedback

School: 19551 Highfield St Matthews CofE Primary School

Science Leader at school: Kelsey Trencher

PSQM Hub Leader: Shehnaz Vorajee

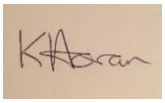
Quality Mark submitted: **PSQM**

Reviewer: Kathryn Horan

Strand	Aim and PSQM Criteria	Observations
SCIENCE LEADERSHIP AIM: Science subject leadership has been strengthened and developed. Science is valued and improved through the development of effective processes for subject leadership.		
SLa	There is a clear vision for science, created and implemented by teachers and children, through principles for teaching and learning.	A new vision for science has been created collaboratively by both staff and pupils and is now a visible feature of classrooms and in lessons. These have unified staff so that they have a shared set of aims for science learning and the resulting improvements in teaching have had great impact on pupil engagement and enjoyment. When the time comes to review your principles, it might be a useful exercise to also gather parents' views so that further stakeholders have been involved.
SLb	Strategic support for subject leadership is provided and includes: • Focussed CPD for subject leader • Regular release time • Resources to facilitate development in science.	Science has enjoyed a boost this year and is now truly a core subject on a par with English and maths. This has had great impact on both the quality and amount of science learning children are accessing. The subject leader has engaged with CPD through the PSQM process and by completing recommended reading. Learning has been shared with other staff and appears to be impacting on the quality of work children are producing in science. To continue the subject leader's professional development, the CPD offer from the ASE is likely to be of use: https://www.ase.org.uk/Events
SLc	There is a monitoring cycle, including pupil voice, that informs actions taken and the development of science.	Monitoring has been carried out through book scrutinies, learning walks and pupil voice activities. These have allowed the subject leader to build up a clear picture of science across school and to provide support directly to teachers where needed. Feedback is given rapidly and always includes good examples and supporting resources to allow teachers to develop. As the monitoring cycle continues, it will be important to look for the impact of this feedback and support on the pupils and their learning.
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 relevant internal or external professional development and support with which staff engage.	Staff are supported in their professional development through feedback from monitoring, with ECTs being a particular focus for support and guidance. This has resulted in quality lessons and good consistency in provision throughout school. Through informing staff about science capital, there also appears to have been impact on the numbers of children interested in pursuing STEM careers in future. To continue supporting staff with busy schedules, the free CPD offer from ReachOut CPD might be of use: https://www.reachoutcpd.com/
Tb	Teachers are supported to use a range of effective strategies for teaching science which challenge and support the learning needs of all children.	Initial information on RAG ratings in the Action to Reflection Planner states that children with differing needs are well catered for through a range of strategies. It is good to see that this has been a focus for the school and that staff have been supported in helping children achieve to their full potential. There is very little evidence of specific strategies used or reflection on their impact in the submission; it would be worth adding reflection on this to the regular monitoring activities to ensure the chosen strategies are having the desired effect.
Tc	Resources are audited annually, well-organised and accessible, so that children can regularly and safely use appropriate practical and digital resources, information texts and the outdoor environment.	Reorganisation and regular replenishment of the science resources means these are very well stocked and easy for teachers to access. This has resulted in more practical lessons taking place as these are now much easier to facilitate, which in turn has led to improved attainment for children. Staff have worked collaboratively to create a reading spine that will enhance children's access to high quality texts and these will be a great addition to lessons when they arrive. Reading comprehensions with science contexts are a good way of giving children extra opportunities to grasp and use tricky vocabulary; make sure to think carefully about the timetabling of these literacy activities so they do not detract from science lesson time.
LEARNING AIM: Science learning has been strengthened and developed. Subject leadership develops teachers' practice.		
La	Children are taught to use different enquiry types to answer scientific questions about the world around them, through the use of scientific enquiry skills.	A much greater emphasis has been placed on children experiencing the five types of scientific enquiry this year, which has resulted in much better content and coverage in all classrooms. Children have also accessed practical lessons more often as a result and their understanding is progressing better, evident through both summative assessment data and the way children are discussing their learning and using scientific vocabulary during lessons. To continue developing in this area, the free resources on enquiry from SEERIH might be of use: https://seerih-innovations.org/enquiringscience4all/downloads/
Lb	A range of strategies and processes for formative, summative and statutory assessment are used, which reflect a shared understanding of the purposes of assessment in science and current best practice.	The subject leader has shared a range of formative assessment strategies which are used by teachers to plan lessons suited to children's specific needs. Summative data is very closely monitored and used by the subject leader to target teacher CPD. This appears to be having a positive impact on the number of children reaching ARE. Teachers may benefit from using the moderation materials available from PLAN Assessment to help them come to a shared understanding of what 'expected' progress looks like for their children: https://www.planassessment.com/
Lc	Initiatives that encourage all children to think that science is relevant and important to their lives, now and in the future, are supported and promoted.	Children's science capital is being raised through learning about famous scientists from different backgrounds and speaking to contemporary scientists. Pupil voice shows that more children are now interested in continuing to engage with science beyond school, which may be a result of these enhancements. To give pupils more opportunities to meet and work with real scientists, you could invite parents and family members who work in STEM based careers into school, or work with local universities to facilitate engagement with students. They could also possibly help out with your planned science clubs.
WIDER OPPORTUNITES AIM: Science has been enriched. Children's experiences of science are enriched.		

WOa	Curriculum planning links science to other areas of learning.	There is clear thought put into progression through scientific knowledge strands and links between science topics over time. Cross curricular links are also mapped out on long term planning documents, but these do not appear to be as well embedded or applied in lessons yet. A good starting point for development in this area would be careful monitoring of pupil work to see where they are applying science skills and knowledge to other curriculum areas, and vice versa. Good practice can then be shared so teachers can gather ideas from each other.
WOb	There is participation in some external initiatives, topical science events and family learning.	Links have been made with a local feeder school and there are plans in place to work on a series of transition activities to better prepare children for secondary school. Although these activities have not yet taken place, the planned actions are clear and intended impact on pupils will be highly beneficial to them making a smooth transition. In terms of links with wider science organisations, there are hundreds out there that can provide free enrichment opportunities for schools; some good starting points for further development may be Farmertime, the Linnaen Society and the NFU: https://leaf.eco/farmertime/home https://www.linnean.org/learning/content/discovery-kits https://education.nfuonline.com/
Final Questions- comment		It is wonderful to see enthusiasm for science and for the improvements that have been made this year summarised in the Final Questions document. There is lots here to be proud of, well done!

Overall comment	The subject leader has worked hard to lead changes across the school during this challenging period. Children enjoy science and their science capital is steadily increasing thanks to adaptations made to lessons and activities. It is wonderful to see that science now enjoys its status as a true core subject; with the elevated importance and value of science and the subject leader's dedication and careful planning, science will continue to thrive at Highfield St Matthews C of E Primary School.
This submission meets the criteria for PSQM	Reviewer's signature  Kelsey has clearly worked incredibly hard this year to develop the quality of science teaching and learning at Highfield St Matthews CofE Primary School. I am sure that you will find your reviewer's feedback helpful, as you work to embed the good practice initiated this year, and to identify next steps in the school's science journey. Congratulations to all at the school – you should be very proud of all that has been accomplished.  Helen Spring, PSQM Hub Leader