

Review feedback (R22 Autumn)

School: 156444937 Barford St Peters COE Primary School

Science Leader at school: Hollie Allsopp
Mary Baker

PSQM Hub Leader: Linda Atherton


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 and principles have been created for the school, taking into account the views of the whole staff team. This has been used as a real driver for improvement in science, with the whole staff team enthusiastically buying in to realising this ambitious vision. There is a wealth of evidence throughout the Portfolio of the principles in action and the far-ranging impact this has had on children's learning and enthusiasm for science. When the time comes to review the principles, it would be good to consult the children on what they consider to be 'good' science, as well as staff, so that their views are also represented.
SLb	Strategic support for subject leadership is provided and includes: Focussed CPD for subject leader Regular release time Resources to facilitate development in science.	The subject leader is incredibly well supported to monitor and improve science, as well as update their own CPD, through regular release time, frequent meetings with SLT and online CPD. As well as having impact on the new subject leader's own knowledge and skills, the cascading down of their learning to other staff has ensured impact in all classrooms. It is wonderful to see that, alongside a clear drive to ensure ongoing improvement, there is also thought put into managing workload and ensuring there is adequate time for necessary actions to be carried out. In the new school year, individual or whole-school membership of the ASE may be useful for the subject leader to continue their professional development journey.
SLc	There is a monitoring cycle, including pupil voice, that informs actions taken and the development of science.	Monitoring has been regularly scheduled and carried out by the subject leader through a range of activities, including book looks, lesson observations and pupil voice, with strong support from the headteacher. As all findings from monitoring have been swiftly acted upon and then followed up with further monitoring, improvements in the quality of teaching and learning have taken place across the school, as well as in teacher confidence. The 'before and after' quotes from pupils demonstrate the fantastic impact this has had on their experience of science; their enthusiasm is palpable! Hopefully the regular release time

		for the subject leader and ongoing support from SLT will continue beyond the PSQM year to allow this improvement to continue.
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.	Teaching staff receive regular feedback on their own strengths and areas for development as part of the regular monitoring and feedback processes. Evidence suggests that staff are quick to act on feedback, ensuring improved lessons for children. CPD is also provided for staff through staff meetings and a folder of resources which is regularly updated by the subject leader. This is embedded practice in the school which all staff are familiar with. It is unclear in the evidence how much of the science-specific content shared by the subject leader is accessed and used by teaching staff; this may be an area in which to carry out some focused monitoring in the new year.
Tb	Teachers are supported to use a range of effective strategies for teaching science which challenge and support the learning needs of all children.	Prior to the PSQM year, all science lessons followed the same structure with very little deviation or innovation. Following support from the science leader, teachers now regularly implement a range of carefully selected strategies to make lessons more accessible and engaging for all pupils. This has clearly had an impact on staff confidence and skills as well as pupil enthusiasm for science. Now that teachers are regularly using a broader range of strategies for all pupils, it might be good to focus next year on those that will help particular groups of children, for example those with SEND or for whom English is an additional language.
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.	Practical resources are well-stocked and clearly organised, making it easy for teachers to find what they need to deliver practical lessons. Whole school planning has been adapted to ensure children have access to quality, science-based texts in every year group. There is also evidence in the Portfolio of children learning in the outdoors. To support further with safe learning practices, it is important to find out if the school is a member of CLEAPSS and share the resources available there with teachers to help them with risk assessments and other health and safety questions.
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.	Following CPD for teaching staff led by the subject leader, teachers are now providing children with a much better range of different types of enquiry. Teachers are now aware of resources to support them with teaching the different enquiry types, making it easier to include them in lessons. As this improvement has begun this year, impact on learning is only just beginning to emerge, but it is clear that children are enjoying science lessons more. To continue development in this area, the free resources available from SEERIH will be helpful, particularly the enquiry type logos which will help children become more familiar with the different types: https://www.seerih.manchester.ac.uk/teachers/resources/

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.	Assessment procedures for science were limited and inconsistent at the start of the PSQM journey, but these have now been made more rigorous and regular throughout school. Mentimeter has been used to help teachers gather whole-class pre-assessment data as well as revisit learning at the end of a unit. This has been popular with both staff and pupils and is a great low-stakes way of finding out about progress across the whole class. To continue development in this area, it would be helpful to increase the range and frequency of formative assessment tasks to ensure children are learning from lesson to lesson. Discussion activities that are already in use, such as those on Explorify, would be useful sources of formative assessment data.
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.	The science leader has worked with staff to ensure children are seeing a broader picture of people who do science and that anyone can be a scientist. This has clearly had impact, as the photo showing children dressed up as scientists shows them in a range of different outfits, not just lab coats! The school also held a successful STEM week which, as well as increasing enthusiasm for science in school, really helped to engage families as well. Now that parents and carers are more enthusiastic about science, this could perhaps be capitalised on by inviting in those parents who work in STEM based fields to talk to children about their jobs.
WIDER OPPORTUNITIES AIM: Science has been enriched. Children's experiences of science are enriched.		
WOa	Curriculum planning links science to other areas of learning.	Prior to the PSQM year, there were very few links made between science learning and other subjects, but this has now changed significantly. In addition to one science-based term topic for each year group, there are also additional links made outside of this in other terms to subjects including history, geography, design technology and RE. This has had positive impact on children's understanding of the relevance of scientific knowledge and skills to other areas as well as their enthusiasm for science. Links between maths and science are not referenced in the Portfolio; if this is something that is not already in place, it would be a good area to prioritise in the new year, perhaps working alongside the maths subject leader.
WO b	There is participation in some external initiatives, topical science events and family learning.	The school's STEM Week has been reestablished following a break during Covid restrictions and is now bigger and better than ever. Children experienced expert visitors, trips to exciting places and lots of engagement with families. The ball investigation homework task was a particular success and it is lovely to see the variety of work children carried out with their families. This has had positive impact on engagement and science capital. The PSTT 'Scientist Just Like Me' resources would be a good place to find contemporary scientists for the planned 'Scientist of the Week' focus in the new year, as these feature scientists from a very diverse range of backgrounds: https://pstt.org.uk/unique-resources/a-scientist-just-like-me/
Final Questions – comment The Final Questions document is a wonderful summary of the transformation science has undergone at Barford St Peters C of E Primary School. The enthusiasm and commitment of the staff team really shines through; it is no wonder this 'buzz' has passed on to pupils too! It is great to see that the subject leader takes a lot of pride in the journey of science this year and rightfully so - there is so much here to be proud of!		

Overall comment	Thank you for sharing your PSQM journey with me; this has been a wonderful submission to review! All staff at the school are enthusiastic about teaching science and improving their lessons, and are well-supported to do so by their hard-working and effective subject leader. Whole-school systems enable improvements to be made and evaluated without adding to teacher workload. The children are enthusiastic and curious about science thanks to their exciting and varied experiences. Barford St Peters C of E Primary School is a great place to learn (or teach!) science. Well done!
	Reviewer's signature 

**Congratulations to you all on achieving the Primary Science Quality Mark.
We wish you every success as you continue to develop science in your school.**

