

PSQM Science Development Log

Colour code your entries as CPD for Subject Leader, CPD for other staff, monitoring activities, meetings with SLT, events/enrichment and other. PSQM Outreach schools (only) should colour code entries for PSQM Outreach activities.

Note that CPD is more than just courses and should include a range of examples of professional support including reading, monitoring activity, informal meetings with a colleague to help with planning etc.

Date	Activity	Who was involved	A sentence or two to explain the IMPACT	What will you do as a result?
<i>Example:</i> 21/04	PSQM Training session 1	SL	SL understands more about PSQM and is starting to think about Science needs of school and how she wants to develop as a reflective leader.	Carry out gap tasks - school self-assessment, PSQM VLE, start log and learn about being a reflective leader.
21/9/23	Lake District Wildlife Park visit	Whole School	Children could see animals first hand and the features which show that they adapt to their environment. They were enthused by the visit to learn more about other African animals and make comparisons.	Use animals seen on the day as examples when delivering animals inc humans topic.
5/10/23	PSQM Training session 1	SL (FS)	SL understands more about PSQM and is starting to think about Science needs of school and how she wants to develop as a reflective leader.	Carry out gap tasks - school self-assessment, PSQM VLE, start log and learn about being a reflective leader.(30/10/23)
19/10/23	Performance Management meeting		HT aware of the expectations of SL through the PSQM year. SL will have time allocated to lead and monitor science effectively.	Plan a staff session to introduce PSQM and to create science vision. (16/11/23)
30/10/23	Spotlight: The importance of reflective thinking.	SL (FS)	Need for specific and measurable targets with consideration to 'so what?'	Detailed A2R planner and reasoning to why specific actions will be taken.
7/11/23	Full Governors Meeting	HT, SL and all governors	All governors aware of the planned developments in science for 23-24 and aware of their monitoring role.	Invite a governor into school for monitoring vision to share progress on the development of science. (26/1/24)

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9/11/23	PSQM training session 2	SL (FS)	Action planning to have SMART targets which can be measurable with linking evidence of before and after.	Complete A2R SL A and start collecting and organising evidence for all sections.
15/11/23	Primary Science curriculum mapping RSC training session.	SL (FS)	Increased knowledge of effective curriculum design, in relation to our school, to ensure progression and coverage.	Science curriculum review -less is more and give time to build knowledge. 2 year mixed age cycle.
15/11/23	Primary Science curriculum mapping RSC training session.	CT	I learnt that planning resources are available via Explorify, Stoke exemplification for primary science and Primary STEM Education Consultancy. I feel a lot more confident about planning a science topic.	I don't currently teach science, but I have a much clearer understanding of how to plan a series of lessons if that situation changes. I know where to find resources to ensure progression across year groups and a year.
16/11/23	Pupil voice	SL and chd	Children's view taken and used in vision so that they feel part of their learning.	Use comments in vision and curriculum development. Plan a science club and use of the outdoors in the curriculum.
16/11/23	PSQM initial staff meeting	FS, CT, FR, JB	Shared understanding of what science could look like at WLHS and how the science vision could be lived out throughout school.	Form a science vision from comments and suggestions from staff and from sharing pupil voice.
20/11/23	Spotlight: what is the curriculum vision for science in your school?	FS	Ensuring progression of knowledge and skills is right for our school and children and that the curriculum includes all aspects of science and links to other subjects.	Show progression in each science topic area, making links with other subject within these topics.
22/11/23	PSQM Scientific Skills RSC training session	CT	I found out about resources that I did know about e.g., TAPs and how they could be utilised to develop progression in skills.	I currently don't teach science, but I now know where to find resources to support my teaching. If that situation changed.

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			I also saw examples of what a progression map should look like.	
28/11/23	PSQM Leading an effective, inclusive and connected primary science curriculum	FS	Our school science vision will promote STEM subjects being a choice for children and develop them as global citizens.	Read PSCTA and show additions to our curriculum following this.
28/11/23	Framework for a Future Primary Science Curriculum document	SL (FS)	Topic plans for science will support and extend children's knowledge and include more inspiring experiences.	PCAG knowledge maps to be used to edit school topic plans, to that knowledge and experiences are pitched correctly.
30/11/23	PSQM session 3	SL (FS)	Importance of choosing effective methods of monitoring and choosing the best for our school, linking to our vision for science.	Create a monitoring schedule with a range of monitoring methods.
1/12/23	Sparkle the science elf	All children and staff	Promoted collaboration and independence in children's learning and ideas, thinking about how to solve a problem for Sparkle.	Plan another similar event, to promote developing scientific questioning. (12/3/24)
5/12/23	PSQM Challenge for more able learners in science from RSC	FS	Planning to include points of challenge so that children are using higher order thinking skills in lessons.	Plan for spring 1 to include challenge points and ID in planning. E.g. lesson 2 – odd one out. See planning.
11/12/23	Life in Africa presentation with Peter	All chd and staff	Children could see African animals in action and ask questions of someone who has seen these animals first hand. Discussions and deepening learning of habitats and diet of these animals.	Add questions and key facts to display.
14/12/24	Meeting with HT	HT and SL	HT aware of ongoing PSQM documentation and tasks to be carried out in Spring term. HT confident in the development work happening in science and SL working with the support of HT and recognition given to the work done.	Plan for British Science Week, drawing on suggestions made.

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5/1/24	Planning meeting	CT/LR	Topic web before the start of unit, to elicit what children already know and to be able to address an misconceptions throughout the unit.	Adapt planning to elicit any misconceptions.
17/1/24	PSQM session: Children's questions by RSC	FS/CT/FR	The children will understand different types of scientific questions and be able to plan out how to find their answers collaboratively in lessons and in science club.	Allow time in lessons for exploring questions with the children and support them to refine their questions for investigation. (See evidence)
17/1/24	LC Spotlight Introducing Science Capital	SL (FS)	Plan visitors and visits with STEM link into the curriculum and plan science days/week and club to raise the science capital in school and children's aspirations.	Request out to the community for visitors to talk to the children. Contact Ivan (from the community) to ask him to come in to share his science work with the children. British Science Week plan
18/1/24	WO B Spotlight Curriculum Enrichment	SL (FS)	Curriculum enrichment will be selected carefully, so that activities make a difference to children.	Ensure that enrichment tasks are used to improve the quality of our curriculum offer.
18/1/24	PSQM session 4 Building Impact	SL (FS)	Scientific enquiry to be made clear to children and staff through the use of posters. These will be displayed in each class and on science vision board to be referred to in science lessons and science club.	Read EEF improving Primary Science report (23/1/23) Download PSCTA handbook Explore PSTT and Ogen trust for resources Create school specific progression documents – look at PLAN and CIEC
23/1/24	EEF improving primary science and science vocabulary	SL (FS)	6 summary of recommendations to be shared with staff to feed into planning and evidenced in lesson obs/book looks so that we know our school strengths and highlight any areas for development.	Summary of recommendations on display in staff board and evidence is lesson obs.

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23/1/24	Read Ofsted report – Finding the Optimum, 2023	SL (FS)	SL confident that the developments through PSQM will support Ofsted’s research into science and our school will have a bank of evidence to support this.	Identify links to other subjects in science curriculum planning. Ensure planning for EYFS is clear and precise.
24/1/24	CPD morning	SL (FS)	Progression specific to school with vision reflected, to make science more meaningful to the children with links to locality and interests. Highlight links to texts and famous scientists, to link science to other subjects and therefore make the curriculum more inclusive to all learners.	Adapt PLAN progression documents to make school specific, related to science vision.
24/1/24	PSTT Enquiry Skills guide	SL (FS)	Identify skills to focus on in each lesson so that children develop an understanding of each skill in isolation, to then develop independence when collaborating in investigations.	Display skills in the classroom to refer to during science lessons and when linking science in other curriculum areas. Identify skills within MTPs
24/1/24	Read The 10 key issues with children’s learning in primary science	SL (FS)	Children to understand what working scientifically looks like, through teacher modelling.	Plan in specific time for modelling thinking scientifically, so that children can use these modelled skills in their own learning.
24/1/24	Read Being Focussed: Monitoring the 10 key issues	SL (FS)	Monitor against priorities, so that staff can develop an understanding of how these look across our school.	Share a summary with staff and select two as priorities for our school. (8/2/24)
25/1/24	Lesson observations	SL (FS) and KS2 teacher (CT) with TA (FR) to support	SL able to support teacher with resource finding and ideas for lesson activities, to increase confidence in the delivery of science.	Teaching strategies to be explored in staff meeting (8/2/24)
26/1/24	Governor monitoring visit	SL (FS) and	Governor aware of what science in looking like at WLH and clear on the improvement areas in	Support governor during feedback at next full governors meeting.

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		parent governor	science. Confident to disseminate this to other governors.	
31/1/24	Meeting with HT	SL (FS) and HT	SL and HT confident that science policy of reflecting the work school is doing in science and promoting the vision.	Share policy at next governors meeting (6/2/24)
1/2/24	Leading science in small schools RSC training	SL (FS)	Children will link science in other areas of the curriculum. Aspirations and science capital will be raised through topical science updates and science careers awareness using NUSTEM resources.	Use ideas to plan out science week. Create areas on science display board for Topical Science area and jobs in science info.
5/2/24	T CI activity – resources for support	SL (FS)	Staff will have more resources to draw on to help them with the planning and delivery of science and hands-on practical work.	Look at PSTT resources CPD unit. CLEAPPS info sheet for staff.
5/2/24	Introducing science capital	SL (FS)	Girls as scientists needs to be planned for and promoted in curriculum and enrichment, so that children will make the choice that science is for me.	Use science capital PPT to share with staff. (8/2/24)
6/2/24	Full Governors Meeting	All governors	All governors familiar with new science policy and able to explain how this reflects the work school is doing to develop science and promote the new vision.	Continued to monitor and evidence that this is the case.
8/2/24	Science – Ofsted Update	SL (FS)	SL and other staff will be more confident to talk about their work and development of science and other curriculum subjects. Development plan to link directly to vision for science and whole school development.	Share summary with staff and watch Ofsted science deep dive videos. Update governors.
8/2/24	Staff meeting – reflection of science teaching strategies and Bi Why this	All staff	Staff aware or the continued development work in science. Teaching strategies options extended and	Lesson drop ins/follow up meetings with staff to monitor staff trialling their

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	enrichment activity? and Science Capital		staff given permission to try out a new approach – take a risk. Priorities – developing vocabulary and trying new strategies.	chosen new strategy. (25/4/24 and 17/5/24)
6/3/24	SL B Spotlight Leading Change	SL (FS)	All staff and children involved in the leadership of science. Stakeholders feel that they can make a difference to subject development.	Share role of a subject leader with all staff – agree on what we should be doing as a subject leader. What is within our capacity and what will make the biggest impact at WLH. (24/5/24)
6/3/24	Spotlight Exploring working scientifically	SL (FS)	Aware of how I can monitor the development of working scientifically and support staff to do the same, whilst developing children’s independence to further their enquiries.	Buy book ‘It’s not fair’ Summarise spotlight for staff and plan enquiry types activity with staff. (24/5/24)
7/3/24	PSQM session 5	SL (FS)	Share examples with staff of impact of what we are doing in science and how this fits into the PSQM portfolio. Staff to become clearer on why we are selecting particular training or events/enrichment activities with children.	Adapt slide layout of portfolio and continue to set out each slide.
7/3/24	Natural England visit	All chd		
11/3/24	Live lesson – British Science Week	KS2 chd KS2 teacher (CT) KS2 TA (FR)	Concepts of complete and incomplete metamorphosis introduced – children didn’t know about two different kinds.	Revisit when covering this topic in science again and use as a basis for learning. Inc in science club in a future session.
11/3/24	The Big Plastic Count launch	All children	Children aware of the impact of plastic pollution on our planet and starting to consider ways to make a difference to reduce this.	Inform parents and encourage families to participate.

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12/3/24	Rocket session with Ivan – retired secondary science teacher	All children Head/KS2 teacher (LR) KS2 TA (FR) SL (FS) EY TA (JB)	Seeing an investigation through from start to end, with further questions for exploration. Being able to create a rocket/adapt an existing rocket, to find out and prove the answers to questions. Enquiry skills made explicit to children, for them to relate future investigations to. Investigation took place across the whole school, so that progression was easy to see, follow and share. Plan in other whole-school investigations in the future.	Display learning Pupil voice Follow up with links to enquiry skills
12/3/24	Visit from pharmacist (parent)	All children KS2 TA (FR) SL (FS)	Children have developed their understanding of what a pharmacist does and the education path taken to become a pharmacist. Highlighting that this role can be a career choice for anyone with a keen interest in science.	Display information and look at other similar careers. Display for children to make links and consider these roles as possibilities for the future.
13/3/24	NFU A day in the life of a farmer live lesson	EYFS and KS1 chd SL (FS) EY TA (JB)	Links to vision statement – linking science to where we live and the things we love. Chd from farming families could make links and compare the jobs a farmer does. Other children developing knowledge of farming life.	Follow up in Summer term topic – plants. Planting wheat, barley, maize, root crops and turnips. Place in food chain and life cycle from seed to harvest.
14/3/24	Animals and fossils webinar	KS2 chd KS2 teacher (CT) KS2 TA (FR)	Use of scientific terminology. Deeper knowledge of particular animals – understanding of the size of African land snail.	Revisit during animals inc humans topic.
14/3/24	Soil talk from farmer (parent)	All chd	Children inspired by the links make from farming to soil studies. Raised awareness with children that people that they know are scientists too.	Plan soil comparison task in upcoming plants unit.

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		KS2 teacher (CT) KS2 TA (FR) SL (FS) EY TA (JB)		
14/3/24	NFU a day in the life of a farm vet live lesson	KS2 chd KS2 teacher (CT) KS2 TA (FR)		
15/3/24	Engineering storytime	EYFS and KS1 chd SL (FS) EY TA (JB)	Children now more aware of the role of an engineer and how they use science in their day to day work. Links identified with Maths and English skills.	Create book box for construction area which links to engineering and promotes the jobs that engineers do. (summer term)
17/3/24	Book look	SL (FS) and KS2 teacher	SL confident that the progression of skills in evident in science and that children are referring to enrichment activities build on future learning.	Plan another book look to focus on the use of pre-assessment. (17/5/24)
18/3/24	How can we use creativity to support children's understanding of scientific ideas?	SL (FS) KS2 TA (FR)	Children will be exposed to a wider range of learning techniques to enable them to deepen their understanding of specific scientific concepts within the plants topic initially. VAK learners catered for in a more inclusive way, therefore widening opportunities for all children.	Plan drama techniques into next topic and make stronger links to art in plants unit of work – e.g. observational drawings over time inc outdoor work. (In plants planning)
19/3/24	Full Governors Meeting	All governors	Governors aware of the wider opportunities and enrichment work in science and the impact that these have had on the progression of children's	Written update for next meeting. (21/5/24)

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			knowledge and skills, staff's confidence in the delivery of science and parent involvement.	
22/3/24	RSC Using technology to enhance Primary Science	KS2 teacher (CT)	Science will have more purpose for children and will enhance learning experiences.	ID links to technology in future planning, inc apps. Enquire with SL about purchasing a digital camera for school.
	Read PSCTA			
22/3/24	Staff to watch spotlight 'keeping it safe'	All teaching and TA staff	Staff more confident to lead or support practical activities. The risk assessment process is beginning to be implemented which gives staff reassurance and will raise awareness of safety aspects of activities with children.	Monitor the inclusion of practical activities in lessons through planning mtgs with staff and lesson observations. (24/5/24)
28/3/24	Meeting with HT	HT and SL (FS)	Focus on 'keeping it safe'. With support of SL and HT, staff will be encouraged to develop learning activities using the guidance from the spotlight. Lessons will be more engaging for children and staff will develop their confidence.	Update and review risk assessments for activities that will be regulars for our children. E.g. going out for walks beyond the school grounds and the return of the hens. CLEAPPS info sheet/resource bank to be created.
3/4/24	Update and review risk assessments for walking out of the school grounds and hens.	SL (FS)	Children will have the opportunity to work out of our school grounds and take responsibility of looking after hens, which will both support their learning and progress in science.	Share with children and staff on the first day of the summer term.
18/4/24	CLEAPPS info sheet/resource bank created and distributed to staff	All teaching and TA staff	Baseline if resources and support for working safely in science, for staff to draw on will help them to feel more supported in their teaching and to be more adventurous in the types of activities they plan more. Learning will be more hands-on for the children and likely to stick.	Continue to add to this with new resources and developments in primary science.

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25/4/24	Lesson Observations	SL (FS) KS2 teacher + TA CT/FR	I observe KS2 – SL secure in knowledge the safe practices are being incorporated into lessons and evidence of links to 4 vision statements.	Planning mtg – assessment focus. (15/5/24) (17/5/25)
3/5/24	Visit to Great North Museum	All children and staff	Children able to see life-size models of animals they have been learning about. Comments made show that they are beginning to understand the scale of their size and observing their features which support the adaptation to their environment.	Continue to carefully select enrichment visits to match learning in topics.
7/5/24	Meeting with HT	HT and SL (FS)	Observation feedback. HT confident that effective monitoring is taking place in science with evidence to support school vision. HT aware of the current focus of assessment, to feed into whole school development.	Ensure assessment tracker is straightforward and can be used and accessed by all staff. (15/5/24)
9/5/24	PSQM training session 6	SL (FS)	Staff will have shared planning expectations and science and form agreed areas for current, specific development.	Meet with staff to collate progress towards KINs and make a last request for evidence for specific areas – linked to KINS. Follow up with e-mail. (17/5/24 and 24/5/24)
15/5/24	Assessment tracker template devised for science units	SL (FS)	Model will a base for staff to devise own for topics planned and will enable them to have a better measure of where the children are in their science learning and how to support them to progress further.	Share and talk through with staff, so that they can build on this to devise their own for each topic of learning. (17/5/24)
16/5/24	Governor monitoring	SL (FS) and parent governor	KIN progress shared and observation feedback – governor has knowledge and confidence to express the work school has been doing to develop their	Support governor during feedback at next full governors meeting. (21/5/24)

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			identified areas of need, with evidence to support from a range of areas.	
17/5/24	Meeting with KS2 science teacher	SL and KS2 teacher	Agreed on areas to include in curriculum overviews and a MTP template, so that vocab and scientific enquiry areas are specific and to be made explicit to the children. Assessment tracker shared to build on in future topics.	Send planning formats to CT and tweak curriculum overviews to make them school specific. Create an opportunity to observe SL teaching science. (23/5/24)
17/5/24	Book look	SL (FS) and KS2 teacher	SL and teacher confident that books are showing a range of links to vision for science and opportunities for deepening children's learning. Pre-assessment evidence in current topic. Reassurance to teacher that it's expected that not all lessons will generate written work – photographs, T and chd comments are great evidence of learning too.	Create space on computer network for gathering other evidence to support chds learning and progress in science.
21/5/24	Full Governors Meeting	All governors	Governors questions linked to development show that they understand in impact of the work around the KINS throughout PSQM. They are able to make connections and give examples when these have involved their own children or can be evidenced in school or through social media.	Update governors again, as more work is done on PSQM documentation, ensuring updates are clear and concise. Further opportunities for sharing at summer 2 meeting.
23/5/24	Lesson Observations	SL (FS) and KS2 teacher	Further support for not all lessons have written work. Lesson discussion afterwards showed evidence gathered to share learning. Teacher aware of how to document these and where to store. (Annotated plans and photos with teacher commentary.) Teacher knows how to use assessment tracker and that this is not onerous.	Share ways to evidence learning with all staff and apply to other subject areas. Whole school development.

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24/5/24	Staff Meeting – modelling enquiry types	SL (FS) with all staff	Raised awareness of working scientifically/scientific enquiry and ways to teach these explicitly through the science curriculum and enrichment. Staff could give examples of the evidence of this throughout the PSQM year. KIN progress shared – staff see their place in whole school development and that this is valued.	Continue to monitor evidence of children’s learning and development of enquiry skills. Make links in future topic plans to other subjects to develop these skills, linked to science.
7/6/23	Pupil voice	SL and chd	Children understanding that their views are valued and that comments will be taken forward for future learning.	Develop the curriculum for 24-25 to build on the experiences that children have enjoyed and used to develop progress.
8/6/23	Cumberland Show display	Whole School	Children felt valued because their work was displayed and celebrated. They were able to talk about this at home with families and at the show. Awarded second place and school with the most points trophy.	CELEBRATE! Share success through social media and newsletters. Take display work to local farm open day that we’ve been invited to.

Continue to update this table throughout your PSQM journey, as this forms an important part of your final submission.