



Name of school	3614 Birchwood Primary School (2)
Name(s) of teacher (s)	Michelle Day
Hub leader	Wendy Precious
Hub	Round12 - Staffordshire Hub 2 (Wendy Precious)
Level submitted	Gold
Reviewer	Bill Roffey


Criteria	Indicator	Observations
A1	There is an effective subject leader for science	The first thing that strikes me as I get in to assessing your application is just how thoroughly professional it looks. Your SL log is incredibly thorough and detailed. You have reached out in an imaginative way to our friends in Australia. What a lovely link! A joint 'live time' investigation. Great idea. You are clearly sharing your work with a broader audience beyond your own school, both locally in a hub and beyond and that is the key gold indicator in this area. The developments seem sustained and sustainable too as they pre-date the period of the PSQM award and you have indicated clearly on your reflections where you want to go next.
A2	There is a clear vision for the teaching and learning of science.	The principles are strong. You have used different stake holders and you have said when they were drawn up, by who, and when they will be reviewed. Some is written in adult speak and some in child speak which is fine. As an 'outsider' to your school, the principles and vision are clear to me and they must be doubly clear to people who attend and work there. Also there are numerous examples of the principles in action right through the portfolio.
A3	The current School Development Plan has appropriate and active targets for science.	The SDP is current and detailed. It pretty much mirrors what you have provided in the PSQM action plan. The targets appear effective and have clear strategies for improvement. For instance, one of your priorities is "learning through a range of practical and hands on science investigations" and I can see how effectively you are doing this through the evidence (pictorial and written) throughout your portfolio.

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A4	There is a shared and demonstrated understanding of the importance and value of science to children's learning.	The staff have taken on board your work in science, and have worked over a period of time to raise its profile to its current position. You have broadened the children's science experience through relevant activities, extensive outreach work, interaction with the community, local businesses and even round the world! All the school's stakeholders – governors, staff, parents, support staff and children have been involved in the journey you have been on, so I have no doubt they all see its value – particularly the KS1 parent who values her daughter's Super Scientist Award so highly. Were I to visit your school, I am sure science would be highly visible both inside and outside the classroom.
A5	The science coordinator knows about science teaching and learning across the school	I think the systems you have in place appear robust and the outcomes are shared with staff. You have a regular system of book scrutinies, learning walks and observations and evidence has been provided in the portfolio of the feedback you give. Your extensive SL log gives me all the evidence I need on this one. I can also see that your findings are reported back to the SMT. My only observation is can you look to share this workload and train up a colleague to shadow you perhaps?
B1	Colleagues have had opportunities for CPD within science including training and support that increases their skills, knowledge & understanding	You have clearly reflected on your needs and the needs of the school. The SL log is extensive as is the staff CPD log. You have used internal monitoring systems to identify needs and have a range of training opportunities in place. I particularly like the succession planning you mention in the B1 reflection as a way of cascading down. You monitor all your activities for impact and have given a clear idea of where you want to go next on the CPD log. Clearly your Y2 colleague valued your input as she has given you nice feedback (on slide). I know you have done work outside your school, I loved the feedback on the 'Partnership Polesworth' slide from an HLTA just prior to teaching a Y4 lesson. Great that you have not restricted your training just to the teaching staff.
B2	There is a range of teaching and learning approaches	You have many different T & L approaches – evidenced by the portfolio. You have started to use these beyond the school gates in your hub. Like Wendy (hub leader) it would have been informative to know what the impact of this has been, although I acknowledge the project is in its infancy. I think the alterations in your time table have been an effective way to give you more time to carry out complete investigations. There are many creative and first hand investigations evident from right across the school. It is clear from you SL log that you have been pre-active in introducing these as well which is another key gold indicator.
B3	There is a range of up-to-date, quality resources specifically for teaching and learning science. ICT is used both as a tool and as a resource for teaching	The evidence in the portfolio shows an extensive range of resources being used across the school. You have managed to access free resources through the local high school (which is quite common), and a local business partner (which is less common). In the action plan you refer to resources are centrally stored and I am presuming there is an effective system of audit and renewal etc. You also loan out which again is unusual but very useful to other schools. Perhaps one way you could further develop this area is to use your busy and effective young science ambassadors to distribute resources to classes for lessons, maintain the area, and ensure the resources are fit for purpose etc. Just a thought.
C1	All pupils are actively engaged in their own learning and achievement; independently making decisions, answering their	This is, by chance, the final one of the criteria I have assessed and I almost don't need to look. Children are 'being scientific' all the way through your school and all the way through your extensive portfolio. It is innovative too, the Y5 Alchemy project being an example of this. Good home links are evident,

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	own questions, solving real problems.	the URGENT MISSION card being a good example of this, and the joint eclipse observation too.
C2	The purpose of science assessment is well understood and shared by the members of the school community. Assessment approaches are designed to fit those purposes.	Assessment is a challenge for all of us, but I think the assessment processes you have out in place are fit for purpose for your school and understood and shared by the school community. You can easily check which children are above, at and below ARE's. Results can then be shared with other members of the school community. You appear to have shared that with other schools in your federation too which is excellent although it would have been helpful to know how effective that has been and if the suggestions you made were taken on board. You might want to have a think about children peer assessing or an approach where children use KWL grids as a simple but effective way to check pre and post topic knowledge.
C3	Children enjoy their science experiences in school	They clearly love their science! I agree with your comment on the C3 reflection about being on a 'science journey'. When you read the whole of your application in one go, that is the feel you get. You use pupil voice effectively and your science ambassadors to gather feedback. Two of the key gold indicators are these: Children's opinions are valued and responded to (they are) and "scientific activities are identified by pupils as something they enjoy and remember." (They will). I would love to be going through your school as a child. It all sounds very exciting! 92% enjoying science is a great testament to all your work in this area
D1	Science supports other areas and contributes to maximising whole school initiatives while retaining its unique status	Love worm week! Right through your portfolio I can see effective links with other subjects. It is there for anyone to see. You are developing an effective citizenship link to Australia. There are links also to DT, history and art to name but 3. You also link well to the real world with the space work and never forget the safety side of things either (noted it on the Greek glue investigation). Really strong.
D2	There are clear links to outside agencies / organisations /communities to enrich science teaching and learning	I almost don't need to look at this one, but I will! The program you have put together is full and extensive. Clearly the children's science is greatly enriched by your drive and energy in this area, and the many links you have. Your science events diary pre dates the PSQM period which I always like to see. You have many visits going out and also initiatives such as the planetarium coming in. You also have again effectively evaluated the initiatives to see whether they are worth considering in the future. You have definitely gone beyond the school gates in this one!
E	General reflection if appropriate	None

Overall comment	<p>I loved reading your application. It is a very strong submission, and a celebration of all that is good in science in your school. You made me feel tired with all you are doing! It meets the vast majority of gold criteria and in some cases goes beyond them. For the future you might want to share the load a little. PSQM is a developmental award and there is a need to keep an eye on the future and have a plan B so the momentum in science would continue if for any reason you weren't there. Also be aware of the wider picture. There many national projects such as BBC Terrific Scientific and Explorify where you can engage in activities and also the ASE and STEM where you can not only join and interact with other networks but also share the great science work you do with a wider audience.</p>
This submission meets the criteria for PSQM Gold level.	<p>Reviewer signature and date <i>Bill Roffey</i> 25.4.17</p> <p>Congratulations on your well-deserved PSQM gold award.</p>  <p>Helen Sizer PSQM Development Leader</p>