

## CASE STUDY

# North Tyneside Learning Trust and the Primary Science Quality Mark Programme

North Tyneside Learning Trust (NTLT) supports its primary schools to take part in the Primary Science Quality Mark (PSQM) programme. During 2019-21, NTLT supported 13 trust schools to take part in PSQM, working with local hub leader Anna Hammill.

PSQM is a yearlong CPD process which helps schools to achieve a quality mark for science, focusing on developing effective, confident science leadership for whole school impact on science teaching and learning. Schools receive PSQM, PSQM GILT or PSQM OUTREACH. The quality mark is valid for three years and can be achieved by all types of schools with primary-aged children, including first, primary, middle and special schools.

## PSQM Case Study

### MONKHOUSE PRIMARY SCHOOL, NORTH SHIELDS

Monkhouse Primary School, part of North Tyneside Learning Trust (NTLT) for ten years, has a curriculum vision to "IGNITE passion, INNOVATE thinking, INSPIRE everyone and shape the future for all."

Using a project-based learning approach, the curriculum is delivered in an engaging way that is meaningful for children. Science leader, Angelika Bowmer, had been in post for three years when she found out about PSQM at a local science network meeting.



### Why PSQM?

Science was a valued subject at Monkhouse Primary before starting the PSQM process but with the school's focus on English and mathematics, the profile of science had stalled in recent years. The time had come to revitalise and enhance science so Angelika was delighted to receive an NTLT bursary for PSQM. Working with her hub leader, Angelika agreed that 'PSQM' was the appropriate quality mark to aim for; this recognises effective leadership which has an impact on improving science teaching and learning across school. The PSQM framework gave Angelika a structure to audit science provision, identify key needs, implement action plans and reflect on impact. Even with the unprecedented challenges of the pandemic, the profile of science was raised; for example, Angelika devised home learning science expectations for remote learning.

**It has been wonderful to be able to take part in open ended scientific enquiries with Sam during lockdown. Science tasks are his favourite so we both look forward to completing those as I do not need to work hard to motivate him.** (Feedback from the parent of a Y1 child)



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## How has PSQM changed science at Monkhouse Primary School?

Creating a whole school vision with principles for science enabled everyone to see the key ideas that make science so valuable to the primary curriculum. It was done collaboratively so that all stakeholders at Monkhouse Primary now have a consistent approach and understanding. It also helped Angelika to plan her CPD and monitoring accordingly, resulting in a more effective monitoring cycle which has led to strategic provision of CPD for staff. Science is now recognised as a core subject across the school with the school leadership team seeing the impact of PSQM in science teaching and in children's work.

**It is clear that across the school, the children are given lots of opportunities to work like scientists through a wide range of working scientifically opportunities. The impact of science CPD has been evident in each year group.**

(Laura Baggett, Head Teacher)

New and experienced staff alike have benefited from the focus on science professional development and have commented on how their confidence in planning and delivering science has increased. Science CPD sessions have enabled teachers to become more adventurous in science, allowing children more opportunities to explore scientific concepts independently. Teachers and children are becoming confident with the five key 'working scientifically' enquiry types. The biggest impact came from 1:1 planning sessions with Angelika; these included using medium term planning formats, question templates and discussing ideas such as suggesting using a scientist rapper to engage Y2 children with learning about plants. More children are now choosing science as one of their favourite subjects and teachers have noticed increased pupil engagement. After pandemic restrictions were relaxed, Year Two and Year Five science clubs started which were so popular that they were oversubscribed.

**Science club was an absolute hit in Year 2. The children absolutely loved making volcanoes and lava lamps. I really enjoyed it myself too!** (Teaching assistant delivering science club)

**My favourite lesson this year was the elephant toothpaste experiment. We got to choose our own ingredients and measurements. I managed to make mine go crazy - I got slightly carried away and it wasn't a fair test. But I have learnt from it.** (Y5 child)

## How has PSQM changed the science leader Angelika?

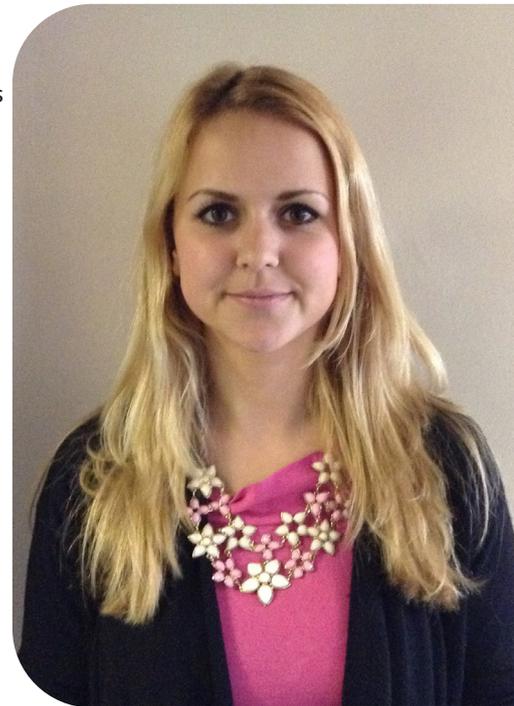
PSQM has proved to be a very effective science leadership training tool for Angelika. She now knows what science looks like across the school and has a wider range of strategies for leadership. She participated in learning walks for the first time and feels that she is viewed as a stronger subject leader by both SLT and staff.

Angelika's highlight of the year was the satisfaction of successfully devising and introducing science 'hashtag' logos for different science enquiry types and she is looking forward to seeing the longer-term impact of this strategy as children become more independent with selecting the most appropriate enquiry type to research their own questions.

### Angelika's advice

**"Sometimes it was tricky to get staff onboard to try new things so I rewarded them by giving recognition, praise... and chocolate!"**

**"I would definitely recommend PSQM to a school that hasn't done it before because doing PSQM puts science first across school. You are guided through the journey by your hub leader and liaise with science leaders from other schools to share ideas and resources. Even if you're experienced, it gives you a broader viewpoint and awareness of good practice."**



# Monkhouse Primary successfully achieved 'PSQM' in September 2021.



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