Exploring questions in lessons: An account of practice from collaborative action research in St Monica Primary School

The Research-Practice Partnership

The **School Voices Research-Practice Partnership** aims to support schools in **responding to student diversity** and **improving learning outcomes** for **all**, whilst at the same time **promoting inclusion**. This will be achieved by focusing on **students' voices and dialogues** between teachers and children and young people through **participatory research approaches**.

The Partnership has been partly funded by **UKRI – Higher Education Innovation Funding (HEIF)**. The Partnership consists of a collaboration between: **University of Southampton** and three **hub schools (St John's Primary and Nursery School, St Mary's CE Primary School, Redbridge Primary School)** that were involved in an earlier pilot study. The hub schools and the University of Southampton support other schools in introducing these ideas through collaborative action research, considering the complexities within each school context. For more information - www.schoolvoices.soton.ac.uk

The school

St Monica Primary School is a part of the Inspire Learning Partnership multi-academy trust, promoting the values of innovation, nurture, success, passion, integrity, responsibility and access, whilst developing an inclusive community where children matter.

The school caters to 358 students (aged 4 to 11 years) and has 14 classes in total. Some year groups have two classes and others, such as Year 4 and Year 5, have three. 38% students are eligible for Pupil Premium. It is noted that the school is not highly disadvantaged. The ethnic composition is predominantly white, with some Polish students. The percentage of ethnic minority students and those with SEND are below the national average.

The school comprises of xx teaching staff members and xx support staff members.

One key initiative at the school is a cyclical, teacher-led action research approach. Lifelong learning and the promotion and development of independent learners is a key objective for the school.

Research focus and process

Led by two teachers, one Year 3 and one Year 4 teacher, the research focus was to explore the role of questions in promoting deeper thinking and enhancing learning opportunities. This focus was part of the school's evaluation of teaching and the school improvement plan. The key focus was to increase the number of children who actively engage in answering questions, aiming to create a more inclusive and participatory learning

environment, so children are thinking and remembering more. The following research question shaped the research focus:

- **How do questions help us to learn and think?**

The six pupil researchers from Years 3, 4 and 5

The school chose the 'Students as Researchers' approach and identified six students, two each from Year 3, Year 4 and Year 5, and were known as 'pupil researchers'. These pupil researchers were identified by the two lead teachers for this project and comprised of children in receipt of pupil premium, those having English as an Additional Language (EAL), attending school for the first time, or from a disadvantaged background.

Each pupil researcher was given a diary/notebook to keep notes and write their thoughts about the discussions in the sessions with other pupil researchers. At the onset, a road map created by the two lead teachers was shared with the pupil researchers, to keep track of each stage of the research process. As they moved along the research process, they would tick mark the specific activity and move on to the next one.
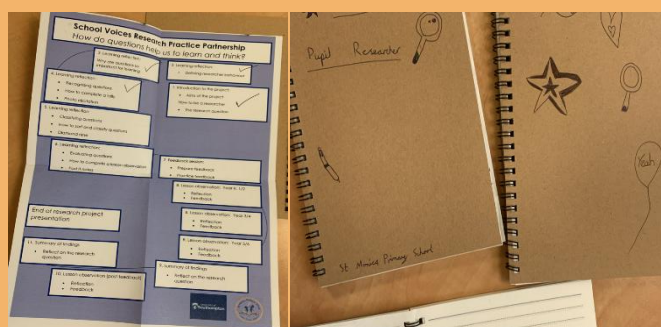
Pupil researchers' diaries and the roadmap

To train the pupil researchers, the two lead teachers facilitated a discussion about appropriate

research behaviours, which was followed by a session about processing questions through one's short-term memory and long-term memory.

To practise lesson observation, the pupil researchers watched a video lesson of another staff member and collectively identified all the questions in that video. The school uses video recording of lessons for staff development purposes. Through this video elicitation, they defined what a 'question' is and classified questions into different types. The questions identified by the pupil researchers were then used in a Diamond 9 ranking activity, through which the pupil researchers determined the most important and most effective questions.

After these pupil researcher training sessions, the pupil researchers put together an assembly presentation for the rest of the school, about what the research project entailed.

To further explore questioning in action, the pupil researchers carried out lesson observations across different subjects and year groups, in the school. They recorded the questions and discussed their observations with the two lead teachers.

After three weeks of lesson observations, the pupil researchers shared their thoughts on what they observed with the teachers. They then revisited the classrooms to see if any of their suggestions had an impact on what was happening in the classroom.

Participatory methods

Video elicitation: The pupil researchers carried out their first lesson observation with the help of a
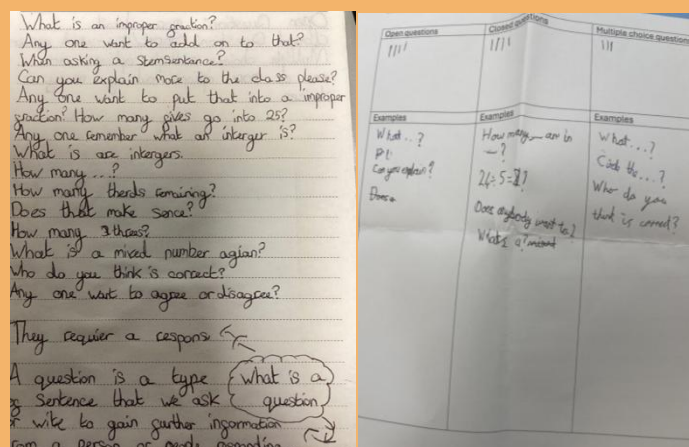

The list of questions and the types of questions observed in the video recorded lesson

video recorded lesson. They observed the video recording and listed out all the questions that were used in the lesson.

With the help of the two lead teachers, they used these questions to arrive at the definition of a question and to understand various types of questions.

Diamond Ranking: To further understand how questions can support learning and thinking during lessons, the pupil researched engaged in the Diamond 9 Ranking Activity. Using the questions that they listed through the video lesson observation, they ranked nine questions in the
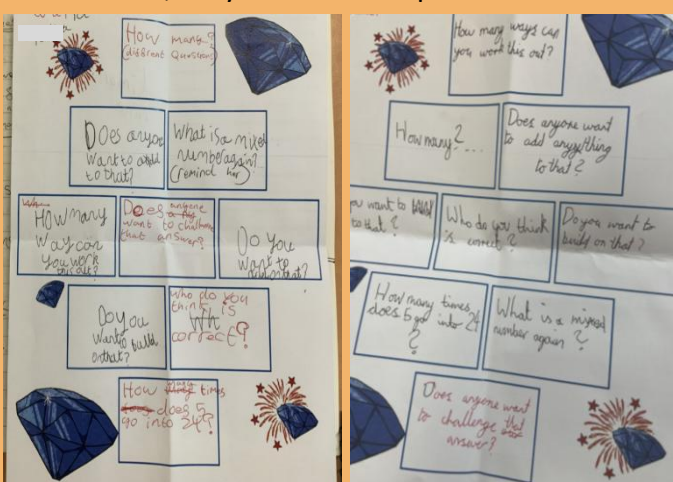
Examples of the diamond ranking activity

diamond 9 template, with what they consider to be the most effective and important questions at the top. This activity was carried out in pairs, before discussing the ranking of questions as group.

Lesson observation template and evaluation form

Lesson observations: To understand questioning during lessons, the pupil researchers carried out lesson observations.

In groups of three, accompanied by one lead teacher, a total of six lesson observations were carried out. During each lesson observation, the pupil researchers were given clipboards with templates and evaluation forms to record the questions, the type of questions being used, and how many children answered each question, in the lesson. After each observation, the pupil researchers and the two lead teachers debriefed and discussed the questions they had listed, how the teacher sought responses to those questions and made suggestions to improve questioning to support learning and thinking.

Pupil researchers and two lead teachers conducting lesson observations and debriefing next steps

Outcomes

Reflecting on and modifying teaching practices: After the lesson observations, 'next steps' on ways to increase the number of children answering questions within their lessons, were collated by the pupil researchers. This served as useful feedback for teachers to modify some of their practices, such

as increased use of whiteboards, and more opportunities for accountable talk.

Increasing pupils' participation in lessons: Through the lesson observations, it was discovered that a variety of excellent questions were being asked during lessons, but participation from the children for each question has been relatively low. This shift in focus helped to identify ways to engage all pupils. The pupil researchers also reflected on how many children were thinking deeply at that moment and how much learning was taking place. Through the feedback from pupil researchers, pupils who might not normally actively participate (e.g. raising their hand) showed stronger understanding when given more structured opportunities to respond.

Developing student researchers' confidence and critical thinking: The whole process enabled student researchers to become more critical and confident. Having discussions with pupil researchers, giving them an opportunity to talk about the research in an assembly, involving them in lesson observations and detailed follow up debriefs, were significant in this respect.

Key ideas emerging

Using a variety of participatory approaches: The pupil researchers had the opportunity to learn more about questioning through a range of methods – video elicitation, diamond ranking, lesson observations. These methods were scaffolded through structured support, ensuring that students could build their confidence and comfort over time.

Structured planning and shared ownership: It is key to plan out the research process, time slots for sessions and co-ordinate with other staff members for lesson observations. Careful and flexible planning can make the research process enjoyable and ensure that the duration for which the pupil researchers are being pulled out of their lessons, is being used efficiently. The pupil researchers were made aware of the planned sessions and research process, from the beginning, ensuring shared ownership between the two lead teachers and the pupil researchers.

Teachers' and Students' thoughts

> I think like the best part, being a pupil researcher was like going into classrooms and exploring what, like how many questions the teachers ask and like for, for the future like ask better questions.

Pupil researcher

> Becoming a student researcher made me observe better and listen closer.

Pupil researcher

> To all the future researchers to say it's not too hard really, even though it might be scary, just it'll help you gain confidence.

Pupil researcher

> When we introduced this idea, they [other teachers] were really receptive. Because it might be because they don't always see it from the children's perspective.

Y3 Teacher

Teacher team
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- Georgina Hirst (Y4 Class Teacher)

Headteacher: Hayley Clark

Research team
- Professor Kiki Messiou
- Dr Jay de los Reyes
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- Karen Ibáñez Riquelme

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