Challenges faced by UK primary schools

Science is not always allocated sufficient curriculum time and some children have entire half terms without any timetabled science. Curriculum design for science is not always coherent.

Children's science learning can be superficial, lacking challenge and depth. Many children do not see themselves as scientists.

Assessment practices do not always inform teaching, leading to insufficient responses to children's needs.

Few primary teachers are science specialists and some lack subject knowledge and/or confidence. Commonly, student teachers have a limited amount of input that is dedicated to primary science.

Few schools have a clear plan for how to develop teachers' knowledge of science and how to teach it. For many schools, professional development for teachers in science is not a priority. Not all science subject leaders have dedicated leadership time.

At the Primary Science Teaching Trust our activities are focused on outcomes for four groups: school leaders, teachers, stakeholders and our College Fellows

School Leaders

Subject leaders and senior leadership teams value science and are enthusiastic, confident and competent to lead its development

Activities

- Bespoke support and mentoring for science subject leaders
- Guidance and professional development for senior leadership teams and governors

Outcomes

Science subject leaders are more confident to identify their schools' needs

Science subject leaders are more effective embedding approaches to meet needs

Schools ensure that science is more embedded as a core subject

Schools are more ambitious for children to develop an identity with science

Stakeholders

We collaborate effectively with our primary science **partners**, with a shared voice that supports schools and **policymakers**

Activities

- Increase PSTT engagement with partners and policy makers
- Work with partners to produce guidance for teachers
- Meet with and make presentations to policy makers

Outcomes

Our sector develops a better shared understanding of 'what works' in primary science

PSTT's voice in primary science is more visible to others in the sector

Schools are better able to access guidance and support about best practice in primary science

Education policy better reflects the importance of primary science

Science curricula better reflect current research and best practice

Teachers

At every career stage**, teachers** deliver practical and engaging science lessons that are relevant and accessible to all children

Activities

- Provision of resources
- Provision of professional development across the UK in response to need
- Free provision of professional development to Priority Areas
- Communications with teachers
- Working with initial teacher education providers

Outcomes

Teachers are more able to:

- understand what constitutes excellent science teaching and learning
- plan and deliver excellent science lessons
- reflect on their own practice to identify areas for development
- access and implement relevant professional development and resources

Initial teacher education providers offer sufficient expertise, time and opportunities for science.

More teachers start their careers:

- with good science subject knowledge and pedagogical understanding
- ambitious and confident to take up leadership roles in science

College Fellows

PSTT College Fellows make a positive contribution to primary science beyond their own schools or settings

Activities

- Recognising achievement with Primary Science Teacher Awards
- Developing a strong community of practice

Outcomes

Fellows are increasingly active with developing and disseminating excellence in primary science

Fellows are more widely recognised as ambassadors for excellent primary science

This supports our long-term vision

The Primary Science Teaching Trust's vision is to see excellent teaching of science in every primary classroom in the UK.

Our working definition of excellence can be found here.

Primary Science Teaching Trust