

Reflecting on practice, planning next steps

Improving primary science

These questions, for primary school science teachers and leaders, link to the six recommendations from E4L's Improving primary science Guidance Report with an opportunity to note reflections and next steps for your school.

Information to support responses should be collected from a variety of sources, on an ongoing basis. This could include school monitoring processes such as curriculum planning documents, lesson observations, learning walks, school improvement plans, and teacher and student surveys.

Find out more in the
Improving primary science
Guidance Report
[E4L.org.au/science-primary](https://e4l.org.au/science-primary)

Guidance Report Recommendation	Questions to consider	Reflections and next steps, including areas of strength and those for development
1  Develop students' scientific vocabulary	- How is science-specific vocabulary identified? - What strategies do teachers use to explicitly teach new science words and their meaning? - What opportunities are there for repeated use of new science vocabulary over time?	
2  Encourage students to explain their thinking	- How are collaborative learning approaches, such as paired and small group work, structured to create a collaborative environment for science learning? - How do teachers plan key questions and discussion points in advance of teaching science topics? - What strategies are in place to cultivate reasoning and justification, for example, 'explain, discuss, re-explain'?	
3  Guide students to work scientifically	- How confident are teachers in ensuring working scientifically integrates science content knowledge? - Are teachers confident in explicitly teaching science knowledge, skills, and processes? - What scaffolds are in place to guide student practice? How is discussion and reflection integrated?	
4  Relate new learning to relevant, real-world contexts	- How is science teaching connected to meaningful and tangible scenarios from real life? - Are these real-life examples implemented consistently across the science curriculum?	
5  Use assessment to support learning and responsive teaching	- What diagnostic assessment is in place to elicit any science preconceptions? - How is teaching built on existing knowledge and experiences? - How is students' learning monitored to inform responsive teaching, feedback, and next steps? - How does this inform planning for progression in science?	
Consider your reflections so far, triangulate your findings to confidently identify areas to prioritise for further support.		
6  Strengthen science teaching through effective professional development	- Which areas of students' science learning need strengthening? What evidence is there for these? - Which aspects of science teaching are teachers finding most challenging? Are there gaps in understanding? Is this reflected in students' learning? - Are teachers using assessment effectively in science lessons? How is this impacting teaching? - Does the support required for science align with school leadership strategic goals or the school improvement plan?	