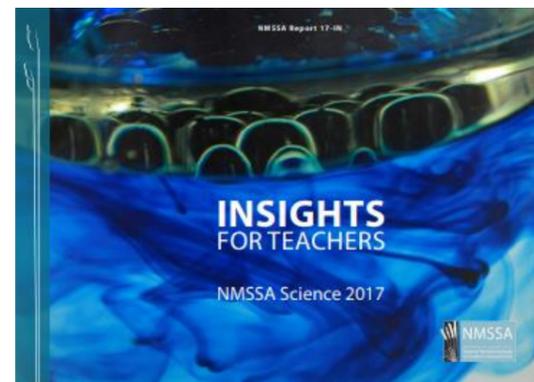


New Resources to Support Progress and Achievement in Science



Science is important learning for schooling, work and life. We need a scientifically literate nation to meet current and emerging social, economic and environmental opportunities and challenges. The more we know about science, as individuals and as a society, the more likely we are to be able to respond to the critical issues facing us locally and globally.

While the New Zealand education system has a lot to celebrate about our achievement in science, the National Monitoring Study of Student Achievement (NMSSA) shows that most students at Year 8 are not making enough progress in science, and in particular the Nature of Science strand. As a result, students leaving primary school may not have the broad science capabilities they'll need to participate as critical, informed, and responsible citizens in a society in which science plays a significant role.

To address this, we've dug deep into the findings and insights from NMSSA to develop a resource to strengthen our understanding of science teaching and learning, with a particular focus on supporting learner progression between Years 4 to 8. The resources below will support schools to strengthen science in your local curriculum design.

2017 National Monitoring Study of Student Achievement for Science: Insights for Teachers

What is this resource?

This resource provides details on the NMSSA science assessment, including a summary of findings from the study, along with practical insights into learning in science at Years 4 and 8. It also includes advice on the disciplinary literacy and numeracy skills students need to achieve in science at these year levels.

How can schools make the most of this resource?

This resource is designed to support teachers of science, in particular those with students in Years 4 to 8. Schools can use this resource to ensure their science curriculum provides sufficient opportunities for students to demonstrate their learning against the science capabilities, including the literacy and numeracy skills students need to effectively engage in science.

This is critical because the science study found that many Year 8 students were not able to demonstrate these skills and capabilities to meet curriculum expectations at curriculum level 4.

This resource can be accessed at:

<https://www.educationcounts.govt.nz/publications/series/nmssa/science/nmssa-2017-insights-for-teachers-science>

Science in the New Zealand Curriculum: Understanding Progress from Levels 2 to 4

What is this resource?

This resource focuses on learning progress in the science capabilities between curriculum levels 2 and 4, drawing from what NMSSA tells us students need to know and be able to do to meet curriculum expectations at these levels. The resource provides clear indicators of progress between curriculum levels 2 to 4, across the five science capabilities that make up the Nature of Science.

How can schools make the most of this resource?

This resource is designed to support curriculum leaders in charge of science to check that their local science curriculum provides coherent pathways between Years 4 and 8. This is important to ensure students who leave primary school have the science knowledge, skills and capabilities they'll need for future science studies, and to engage critically and effectively in science in their everyday lives.

This resource can be accessed at:

<http://scienceonline.tki.org.nz/What-do-my-students-need-to-learn/Progress-and-Achievement-in-Science>

Note we are encouraging sector feedback on this resource (see details to the right). At this stage we expect a final resource considering sector feedback to be published in Term 4.

What else is in the pipeline for science?

Supporting learners and their whānau to understand progress in science

This supplementary resource will unpack the progress indicators from the *Science in the New Zealand Curriculum* resource, to support conversations on science learning between teachers, whānau and learners. This will support whānau to be more actively involved in their child's science learning.

Have your say

Are you finding these resources useful?

Are there ways you think they could be strengthened?

What other science supports would you find useful?

We're keen to hear your views, please email: science@nzcer.org.nz