

2018

National Assessment Program
**Science Literacy
Information
for schools**

This year, a sample of Year 6 and Year 10 students from across Australia will take part in a national online assessment in science literacy.

What is the NAP – Science Literacy sample assessment?

The National Assessment Program (NAP) is designed to measure student progress towards the goals outlined in the Melbourne Declaration on Educational Goals for Young Australians, 2008.

The NAP Sample assessments are a suite of tests, deployed in a three-yearly cycle, that monitor student achievement in science literacy, ICT literacy and civics and citizenship.

The science literacy assessment has been held every three years since 2003. In 2015 it was conducted online for the first time. 2018 marks another milestone – this is the first year that Year 10 students will participate in the assessment.

In an increasingly technological environment, students who can understand natural phenomena and apply scientific method to make sense of what they experience are at a significant advantage.

By interpreting information on scientific issues, asking questions, conducting investigations, making decisions, and communicating their findings, students develop their problem-solving skills and are able to participate more fully in the world around them. The NAP Sample Science Literacy assessment recognises science literacy as essential to this process.

How is the NAP sample assessment program run?

The Australian Curriculum, Assessment and Reporting Authority (ACARA) develops the sample tests in consultation with curriculum and testing authorities and practising science teachers in each state and territory.

To administer the tests, ACARA contracts a service provider. The 2018 NAP Science Literacy assessment will be administered by the Australian Council for Educational Research (ACER). NAP sample tests are delivered to students over the same online platform used for the annual

NAPLAN tests. ACARA has worked closely with its technology partner, Education Services Australia (ESA), to ensure that teachers and students can be confident of a robust and easy to use test delivery system.

The assessments will be held in Term 4 during October and November 2018. Each test session will run for 60 minutes (Year 6) or 75 minutes (Year 10). Schools should also allow time for setting-up, preliminary instructions, and the completion of practice and survey questions.

How are schools and students selected to participate?

Around 11,200 students from approximately 560 schools will participate in the sample assessment. The sample of schools is 'stratified' to ensure that government, Catholic and independent schools from metropolitan, rural and remote locations are appropriately represented.

ACARA's contractor, ACER, will ask participating schools to supply student lists for the relevant school year (Year 6 and/or Year 10). From these, ACER will select 20 students from each participating year at each school.

How are the tests constructed?

The NAP-Science Literacy assessment comprises questions and tasks that enable students to demonstrate achievement and understanding at a range of levels.

Additionally, students are provided with an opportunity to complete practice questions before progressing to the online assessment.

Activity	Description
Practice questions	Students complete a small set of questions to familiarise themselves with the type of question they can expect.
Objective test	Students complete a series of questions which include multiple choice, 'drag and drop' and short answer questions.
Inquiry task	Students engage in a task that reflects the key stages of a scientific investigation and answer a series of questions on it.
Student survey	Students complete a short survey regarding their perceptions of, and attitudes towards, science and their experiences of science learning at their school.

How will the assessment be conducted?

During term 3, ACER will make contact with participating schools to provide training material and assist in the preparations schools must make to ensure they are ready to administer the test.

Prior to the assessment, schools will be able to determine the suitability of their computers/devices for the test by completing the required technical device checks.

On test day, the test session will be conducted by a nominated staff member from the school.

The training information provided to schools by ACER will ensure that the assessment is administered in a nationally consistent manner.

What are the outcomes?

The Science Literacy assessment is specifically designed to provide national, state and territory comparable data and to identify overall trends.

Schools will receive information summarising their students' performance in the tests before the end of the 2018 school year.

A public report on the results of the Science Literacy assessment, to be released in 2019, will document achievement in relation to the defined national proficiency levels. No individual student or school result will be published.

This report will include:

- analysis of the performance of different groups of students — for example, differences across genders, states/territories and metropolitan/regional schools
- comparison of science literacy across cohorts of Year 6 and Year 10 students
- comparison of achievement levels over time.

Selected materials (which include sample questions) from previous cycles of the NAP – Science Literacy assessment are available on the National Assessment Program website at www.nap.edu.au/nap-sample-assessments/school-support

Further information

Support for participating schools is available from the NAP – Science Literacy Helpdesk on 1800 599 426 or email: napsience@acer.org

General information about the National Assessment Program and the Science Literacy assessment can be found at www.nap.edu.au or by contacting ACARA at info@acara.edu.au