



## Skills assessed by the Literacy and Numeracy Test for Initial Teacher Education Students

This document describes the broad literacy and numeracy skills and capabilities measured by the Literacy and Numeracy Test for Initial Teacher Education Students (the test). It provides context for the test, and outlines how the level of achievement required by candidates to meet the test standard was determined.

### Background and context

All education ministers agreed that, from 1 July 2016, a nationally consistent and benchmarked test will be used to demonstrate that students completing initial teacher education programs are in the top 30 per cent of the Australian adult population for personal literacy and numeracy.

The test has been developed to assess the specific personal literacy and numeracy skills required by graduate teachers working in Australian schools. The questions on the test are set in contexts that include:

- everyday life and the workplace
- modelling literacy and numeracy as a professional
- participation in an initial teacher education qualification from a higher education provider.

In these contexts, the test assesses generic personal literacy and numeracy skills, as opposed to subject-specific skills, knowledge and understanding that a teacher of literacy and numeracy would use in teaching subjects such as English and Mathematics. All teachers must be competent in personal literacy and numeracy, regardless of their teaching specialism, to be an effective teacher and foster and develop these skills in their students.

### Scope of the test

The test is an online machine-marked test. It is not intended as a comprehensive measure of the full range of capabilities and skills of initial teacher education students. It measures those literacy and numeracy capabilities and skills that can be reasonably assessed in an online environment. It does not measure oral or written communication skills.

Most responses in the test are multiple choice. There are also some constructed response items, including questions that require candidates to type the correct spelling of a misspelt word or enter a numeric response.

## Test framework

The test applies a standard achievable by the top 30 per cent of the adult population for personal literacy and numeracy. Literacy and numeracy specialists collectively shared and drew upon their expertise in the development of the test and related assessment framework. The test assessment framework has been developed by reference to existing frameworks for adult competency in literacy and numeracy, in particular the [Australian Core Skills Framework \(ACSF\)](#) and the [Programme for International Assessment of Adult Competencies \(PIAAC\)](#).

The ACSF is a tool which assists both specialist and non-specialist English language, literacy and numeracy practitioners to describe an individual's performance in the five core skills of reading, writing, learning, oral communication and numeracy. Three core skills – reading, technical skills of writing and numeracy – are assessed in the test.

The PIAAC is an Organisation for the Economic Co-operation and Development survey that measures adult skills and competencies including literacy, numeracy and problem solving skills, with a particular focus on skills used at work, computer and 'information age' skills and drivers of low literacy performance.

## Literacy

For the purposes of the test, personal literacy is defined as *'understanding, evaluating, using and shaping written texts to participate in an education community to achieve one's goals, and to develop one's knowledge and potential as a teacher'*.

Questions in the literacy test assess reading skills and the technical skills of writing (syntax, grammar, spelling, word usage and text organisation). Two thirds of the literacy test assesses reading and one third the technical skills of writing. This is in recognition that writing can only be partially assessed by the test.

Seven text types, or genres, are used in the test:

<i>Text type or genre</i>	<i>Example</i>
Narrative	realistic and imaginary scenarios from fiction and drama, as well as biographies and autobiographies
Descriptive	a recount of a school excursion; essay comparing two teaching approaches
Informative	a school newsletter, research paper on developments in school buildings over time
Persuasive	a report to the principal presenting argument and recommendations for new equipment purchase
Procedural	standard operating procedures for use of digital whiteboards; fire drill instructions
Regulatory	describing training course completion requirements; an education department directive
Technical	information on features of new computer system in a school library

Reading texts in the test may range from 100 to about 900 words. Material has been included that has broad appeal and covers diverse topics, points of view and life experiences. Test questions vary in their degree of complexity to differentiate between different skill levels in reading. This means that the questions cover material that ranges from familiar with a clear purpose through to highly complex texts.

As outlined above, the technical skills of writing assessed in the test are syntax and grammar, spelling, word usage and text organisation. The specific processes assessed include:

- the use of appropriate verb forms, subject/verb agreement and the correct use of pronouns and punctuation (syntax)
- the identification of spelling errors and the generation of the correct spelling of words that are frequently misspelled and that are likely to be part of a teacher's personal or professional vocabulary (spelling)
- identifying the word that is closest in meaning to a given word and choosing words that are appropriate to the purpose, audience and context (word usage)
- structuring texts so that they are logical and coherent (text organisation).

## Numeracy

Personal numeracy is defined as *'interpreting and communicating important non-technical mathematical information, and using such information to solve relevant real-world problems to participate in an education community, to achieve one's goals, and to develop one's knowledge and potential as a teacher'*.

The numeracy test measures skills in number and algebra, measurement and geometry, and statistics and probability. Examples of the content in the test include but are not limited to: every day calculations with whole numbers, money, fractions and percentages; ratios; budgeting; interest calculations; timetables and schedules; space and shape such as location and direction on maps; area of common rectilinear shapes; understanding of volume and capacity of everyday objects; use of metric units; and use of statistics, in particular interpretation of graphs and data in every-day and school-based contexts.

There are three types of numeracy processes examined in the test. They are:

- identifying mathematical information and meaning in activities and texts
- using and applying mathematical knowledge and problem solving processes
- interpreting, evaluating and communicating, and representing mathematics.

Most numeracy questions (80 per cent) allow the use of an on screen calculator but some (20 per cent) do not. The test clearly identifies the questions that do not permit the use of a calculator.

### More information

Further information on the standard assessed by the test is available in the [Literacy and Numeracy Test for Initial Teacher Education Students Assessment Framework](#) and in the [Questions and Answers for Students](#). [Sample questions](#) for the test are also available.