



**Teaching  
Council of  
Aotearoa  
New Zealand**

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# Guidelines for Initial Teacher Education Programmes: Using the LNAAT Numeracy Assessment

## About These Guidelines


These guidelines provide:

- An overview of the Literacy and Numeracy for Adults Assessment Tool (LNAAT).
- Information about the LNAAT numeracy assessment.
- Information about the role of Initial Teacher Education (ITE) providers regarding the use of the LNAAT.

## Introduction

The Teaching Council's commitment to strengthening numeracy entry requirements for ITE programmes aims to enhance primary teachers' mathematical capability and, in turn, improve student achievement. This complements the work of ITE providers in preparing teachers with a solid grounding in both mathematics content and effective teaching practices. To support this commitment, the Council has designated the LNAAT as the assessment tool for 2025 for demonstrating mathematics competency for student teachers in primary ITE programmes (English medium).

LNAAT, developed for the Tertiary Education Commission (TEC) and administered by the New Zealand Council for Educational Research (NZCER), has been a reliable tool since 2008. Originally introduced as part of the Literacy and Numeracy Strategy (2008–2012), its purpose was to assess and track adult learners' literacy and numeracy skills, identify learners' proficiency levels, support teaching and learning, measure progress over time, and inform government policy and funding decisions. The numeracy component evaluates skills using a six-step progression aligned with the Learning Progressions for Adult Numeracy, ensuring assessments reflect the foundational numeracy skills needed for everyday and vocational contexts.



As 2025 is a transition year, candidates need to pass the prescribed assessment prior to graduation (the Teaching Council's intention is that the competence assessment will move to become an entry requirement). Student teachers in English-medium primary ITE programmes must achieve a score between 690 and 800 on the LNAAT numeracy assessment to graduate, though they may score higher. This means students are demonstrating competency at Step 6 of the Learning Progressions for Adult Numeracy.

## LNAAT Numeracy Assessment Options

The LNAAT numeracy assessment offers flexible options to accommodate a variety of purposes. The following options are recommended for ITE providers to accurately assess students' numeracy skills in alignment with the Teaching Council requirements.

### Computer Adaptive Assessment

The LNAAT numeracy assessment is computer-adaptive, meaning the difficulty of questions adjusts based on a student's responses. If a student answers correctly, they will receive progressively harder questions. If they answer incorrectly, the assessment provides easier questions to better identify their current numeracy level.

The online adaptive assessment is the recommended option due to its:

- Accuracy: The assessment adapts to student responses, automatically tailoring the numeracy assessment to their achievement level as they progress.
- Immediate results: Feedback is available immediately, enabling timely support for those students who do not pass on their first attempt.
- Efficiency: Automated marking reduces administrative workload.

### Youth and Adult Assessment Options

The Youth assessment option was developed to better engage learners who may be less familiar with the workplace contexts featured in many adult assessment items. As a result, Youth assessments include more 'everyday life' contexts. Both Youth and Adult assessment options are available for learners of any age. However, the Youth option is recommended for ITE providers, as it is the most up-to-date and engaging assessment, better reflecting the numeracy skills relevant to student teachers.

For more details, visit the [Literacy and Numeracy for Adults website](#).

## ITE Providers' Role

ITE providers can play a key role in supporting students' numeracy development and assessment success. While approaches may vary depending on institutional resources and priorities, key considerations include:

### 1. Embedding numeracy development:

- Where possible, integrate numeracy teaching throughout coursework to build students' confidence and competence in mathematics.



## 2. **Assessing early and strategically:**

- Conduct assessments early in the year to help identify students who may benefit from additional numeracy support.

## 3. **Supporting student success:**

- Provide access to resources and guidance to assist students in developing their numeracy skills. Where feasible, offer targeted support for those who require further assistance to meet assessment expectations.

## 4. **Maintaining assessment integrity** (as specified in the Teaching Council's requirements):

- Implement institutional processes to verify that the individual completing the LNAAT is the same person enrolled in the programme.
- Ensure that assessment conditions are upheld, including verifying that no external support (e.g., AI, internet searches, calculators where not permitted, or assistance from others) is used during the assessment.
- Calculators are permitted for all questions unless explicitly stated otherwise:



**You may not use a calculator for this question.**

# Preparing Students for the LNAAT Numeracy Assessment

## Preparing students in advance

### Explain the purpose and format

- Provide students with a clear overview of the assessment, which includes approximately 30 word problems requiring practical applications of mathematics. Most are multiple choice, but some require filling in the blank or drag-and-drop responses.

### Provide content guidance

- Share a list of key topics covered in the assessment (See Appendix 1).

### Recommend practice resources

- Offer students access to online tools and practice assessments, such as:
  - **Pathways Awarua:** Developed by the TEC to support adult learners to strengthen their numeracy skills.
  - **National Numeracy Challenge:** A free online tool to assess and improve everyday math skills.
  - **OLNA Numeracy Sample Quiz:** A 10-question quiz to evaluate numeracy skills.
  - **Practice Aptitude Tests:** Free basic numeracy tests with fully worked solutions.
  - **MathQuery:** Interactive quizzes covering arithmetic, geometry, algebra, and calculus.
  - **Fibonacci Numeracy Tests:** Practice tests for word problems, number sequences, and numerical reasoning.

## At the time of the assessment

### Clarify expectations

- Provide clear instructions and address any potential concerns or anxieties.
- Specify which tools are allowed:
  - Calculators are permitted for certain questions, but not all.
  - Pen and paper are recommended for notetaking and calculations.
- Inform students that their results and accompanying feedback (see below) will be available immediately upon completion.
- Advise students that if they do not meet the required level, this is not uncommon, and they will receive support and additional opportunities to resit the assessment.

### Explain the adaptive nature of the assessment

- Highlight that because the LNAAT numeracy assessment is adaptive, students should expect to encounter questions that feel challenging. This is a normal part of the process—answering questions correctly leads to more difficult ones, while incorrect answers help the system identify the appropriate skill level.

### Emphasise time management

- The assessment typically takes 45-60 minutes to complete, but there is no strict time limit for sitting the assessment. Providers may choose to set a time limit of up to two hours.
- Encourage students to take their time on the first 10-12 questions, as these set the difficulty level.
- Students can skip the video on the front page, watching it is not necessary.

## During the assessment

- Use institutional processes or policies to establish appropriate exam conditions, ensuring a quiet and supportive environment that allows students to focus.
- Be available to assist with any technical issues or questions that may arise during the assessment.
- Encourage students to answer all questions, even if some are challenging, as they must complete each question before moving on.

## After the assessment

- The LNAAT provides immediate feedback to students through its automated reporting system, highlighting areas of strength and areas for improvement.
- The 'End of Assessment Report' report shows:
  - The step the learner is at on the learning progressions - the dotted line on the individual Learner Assessment Report shows where the learner's achievement is located on the measurement scale.
  - Whether they answered each question correctly.
  - The organisation administrator's and educator's view of this report includes clickable links to each question, including step value, question intent, and the answer options the learner had to choose from.

- ITE providers have discretion to determine when and how many times a student may take this assessment. NZCER recommends as best practice for using LNAAT that the frequency of taking the assessment is once per term, to meet the standard, depending on institutional policies and resources. Students can also complete as many practice exercises as they wish before taking an assessment.
- Where feasible, providers may arrange additional support for students who do not meet the required standard.

For exemptions, please see <https://teachingcouncil.nz/professional-practice/ite-providers/mathematics-requirement/> or contact [enquiries@teachingcouncil.nz](mailto:enquiries@teachingcouncil.nz)

## Accessibility

ITE providers should aim to foster inclusive and mana-enhancing environments to support all learners. Where possible, they may consider ways to accommodate learners with additional learning challenges. Each learner will have their own level of need, and this should be reflected in the type of support that is provided them.

## Recommended practices

Where possible adapt assessment environments. This could be through providing a space where the learner can complete the assessment, or you may need to provide additional support such as: screen adjustments, or reader-writers, or additional time. These accommodations should be consistent to those recognised by NZQA as Special Assessment Conditions.

## Conclusion

These guidelines are designed to help ITE providers effectively prepare students for the LNAAT numeracy assessment, ensuring they are well equipped to meet graduation requirements and support student achievement. By embedding robust numeracy support within ITE programmes and using the recommended online adaptive assessment, providers can uphold high standards and foster success among future teachers.

## Contacts and Further Resources

For assistance, contact the LNAAT Service Desk:  
[assessforadults@nzcer.org.nz](mailto:assessforadults@nzcer.org.nz)

For the LNAAT tool visit:  
<https://assess.literacyandnumeracyforadults.com/Login.aspx>

For more resources, visit the LNAAT Support pages:  
<https://assessforadults.nzcer.org.nz/support/home>

## **APPENDIX 1:**

# **Key Content in the LNAAT Numeracy Assessment**

### **Number**

- Basic facts (e.g., addition, subtraction, multiplication, and division)
- Addition, subtraction, and multiplication to at least 3-digit numbers, including integers and decimals
- Types of numbers (e.g., factors, multiples, odd/even, exponents, including powers of 10, integers)
- Place value of decimals, including multiplying and dividing by 10, 100, 1000, and their multiples
- Order of operations
- Rounding to decimal places and significant figures, and rounding whole numbers to the nearest 10, 100, 1000
- Naming and ordering fractions
- Equivalent fractions (e.g., completing a conversion table)
- Fractions - addition, subtraction, multiplication, and division
- Converting between improper and mixed fractions
- Converting between fractions, decimals, and percentages
- Finding a percentage of an amount
- Solving reverse percentage problems (e.g., If 60% of a total is 90, what is the total?)
- Ratio
- Understanding and solving proportional reasoning problems (e.g., if I need 6 eggs to bake 10 cakes, how many eggs will I need to make 15 cakes?)

### **Measurement**

- Converting between metric units of length, area, and volume
- Appropriate units and metric conversions: length, area, capacity (liquids), mass (weight)
- Finding perimeter, circumference, area of 2-dimensional shapes (circle, square, rectangle, triangle, parallelogram, regular and irregular polygon, and composite shapes)
- Finding the volume and surface area of 3-dimensional shapes (e.g., cuboid, prism)
- Performing calculations involving time