

LALOR EAST PRIMARY SCHOOL

MATHEMATICS POLICY

Rationale

Mathematics teaches us how to recognise, add, subtract, multiply and divide numbers and use them in everyday situations. These skills are used in Calculation, Measurement, Shape, Statistics and Probabilities; in fact in most aspects of our lives. We must further develop the ability to assess and apply these results and to understand the thinking required behind the processes.

Broad Guidelines

1. Use the *Scope and Sequence* documentation to focus teaching on improving numeracy outcomes
2. Follow the **Lalor East Primary School Assessment Schedule** and use collected data to inform teaching
3. Moderate and triangulate data (for, as and of learning) to inform teaching
4. Follow the Region based - Achievement Improvement Zones Lesson Structure (see lesson structure below)
5. Communicate high expectations of student achievement
6. Consider the cultural and socio-economic backgrounds of students when planning numeracy sessions
7. Identify and refer students for participation in intervention or extension programs
8. Share skills and expertise through collaborative discussion; planning strategically and utilising expert numeracy mentoring
9. Explicitly teach the 9 Problem Solving Strategies (Peter Maher).

Implementation

Planning:

- a minimum of **5 hours** of Mathematics to be taught each week
- year level teams will plan together each term to create term planners that reflect AusVELS content in sequential growth. These will include clear outlines of Learning Intentions, activities, number fluency and resources for each planned lesson.
- Mathematics sessions will be structured, explicit and sequenced to cater for one-to-one, small group and whole class settings
- flexible student groupings, based on data, will be implemented
- evidence of the Region based - Achievement Improvement Zones lesson structure (Number Fluency, Warm Up, Launch, Explore, Summarise, Share) will be in weekly work programs
- an **explicit** Learning Intention for each maths session is to be displayed and communicated to students
- real life situations will be a focus, with students given regular opportunities to use concrete materials to deepen understanding of concepts
- individual grade work programmes will contain detail about differentiation for each Mathematics lesson
- a wide range of available and appropriate technology will be used.

Lesson Structure

Lalor East Staff will follow the Region based - Achievement Improvement Zone lesson structure:

- Number Fluency (10 min)
- Learning Intention (5 min)
- Whole / Launch (10 min)
- Part / Explore (25 min)
- Share Time (10 min)

Classroom Practice

- ensure time on task is purposeful and maximised. e.g. The task relates directly to the Learning Intention
- rove consistently to provide purposeful feedback throughout each session
- make explicit connections between related concepts. e.g. repeated addition and multiplication
- provide explicit instruction in the development of mathematical language
- ensure students are exposed to a wide variety of learning techniques including, co-operative learning and child centred problem-solving activities
- relate tasks to real life experience wherever possible
- allow time each lesson for students to reflect on their own thinking and learning
- provide opportunities for self and peer assessment
- cater for individual needs by using a variety of teaching approaches and methods and planning for differentiation.

Assessment and Reporting:

- **refer to whole school assessment schedule for testing requirements and dates**
- regularly monitor student progress (collective responsibility for cohort)
- follow a whole-school approach to communicating and reporting on evidence of student progress in numeracy
- use the Scope and Sequence documentation and AusVELS to inform decision making
- make systematic use of numeracy transition data and school level numeracy assessment data
- use feedback from parents, students and staff in support of improved student outcomes.

Professional Development:

Lalor East Staff will attend fortnightly Numeracy Professional Learning Team forums to reflect on and improve teaching strategies by:

- reporting back on the progress of students
- discussing focused strategies that will be used by all teachers e.g. count on, near doubles etc.
- extending Mathematics teaching practice by reading relevant articles and references
- planning the next stage of learning for identified cohorts
- sharing learning and new understandings in appropriate forums
- communicating expectations of numeracy development to parents/caregivers and families, including ways they can maintain support.

Evaluation

This policy will be reviewed with consultation with all staff members as part of the school's three year review cycle or at times that the Principal forms the opinion that the school warrants a review.

Approved by School Council: June 2015

Review Date: June 2018