

Mathematics Policy

St Albans East Primary School

Date: May 2017



Rationale

Mathematics provides students with access to important mathematical ideas, knowledge and skills that they will draw on in their personal and work lives. The curriculum also provides students, as life-long learners, with the basis on which further study and research in mathematics and applications in many other fields are built.

Mathematical ideas have evolved across societies and cultures over thousands of years, and are constantly developing. Digital technologies are facilitating this expansion of ideas and provide new tools for mathematical exploration and invention. While the usefulness of mathematics for modelling and problem solving is well known, mathematics also has a fundamental role in both enabling and sustaining cultural, social, economic and technological advances and empowering individuals to become critical citizens.

(Taken from the Victorian Curriculum and Assessment Authority Rationale)

Aim

The Mathematics curriculum aims to ensure that students:

- develop useful mathematical and numeracy skills for everyday life, work and as active and critical citizens in a technological world
- see connections and apply mathematical concepts, skills and processes to pose and solve problems in mathematics and in other disciplines and contexts
- acquire specialist knowledge and skills in mathematics that provide for further study in the discipline
- appreciate mathematics as a discipline – its history, ideas, problems and applications, aesthetics and philosophy. (Taken from the Victorian Curriculum and Assessment Authority Aims)
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in **Number and Algebra, Measurement and Geometry, and Statistics and Probability** as outlined in the Victorian Curriculum.

Implementation

- The Victorian Curriculum will be implemented strategically across all year levels ensuring a sequential, guaranteed curriculum based upon the achievement standards.
- Mathematics study for each student will be not less than 5 hours per week.
- Lessons will be planned and implemented using the Numeracy hour structure which includes:
 - a warm up which provides opportunities for creative thinking.
 - explicit teaching which revisits student prior knowledge and makes links to new learning.
 - student task which includes a variety of learning contexts (e.g. individual, pair and group work) Tasks provide learning opportunities for all students by catering for their individual needs.
 - reflection time which provides structured opportunities for students to articulate what they are learning and how they know they are successful.

- Student progress across the three mathematical content strands will be reported in half and end of year academic reports, as well as in the school's annual report. ·
- Tracking student progress throughout the year will promote the highest level of student achievement.
- Formative and summative assessments are ongoing as outlined in the school's assessment schedule and are in line with DET initiatives.
- Individual Learning Plans will be written for all 'at risk' students including students working below/above the expected level.
- An annual Mathematics program budget will be developed by the Numeracy Coordinator, seeking feedback from staff and resourced by school council.
- The ongoing development of mathematical literacy will be fostered through linking 'real life' situations to a mathematical context.
- 'Hands on' materials, mathematical tools, such as calculators and digital technologies are an essential component in the implementation of all math lessons.
- The Victorian Curriculum scope and sequence will be used in developing the math program to best meet the needs of all students.

Evaluation

This policy will be reviewed as part of the school's three-year review cycle.

Review Year

2020