

# Mathematics Policy

## 1. Definition

- 1.1 DET – Department of Education and Training
- 1.2 Mathematics incorporates the strands *Number and Algebra, Measurement and Geometry and Statistics and Probability*.
- 1.3 Learning mathematics creates opportunities for and enriches the lives of all Australians. The Australian Curriculum develops the numeracy capabilities that all students need in their personal, work and civic life, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built. (ACARA 2014)
- 1.4 IB-PYP - International Baccalaureate–Primary Years Programme
- 1.5 AusVELS – Australian Curriculum / Victorian Essential Learning Standards 2016
- 1.6 Victorian Curriculum – 2017 onwards
- 1.7 ACARA – Australian Curriculum, Assessment and Reporting Authority
- 1.8 Inquiry – Kath Murdoch Inquiry Model (Tuning In, Finding Out, Synthesising and Reflecting, Acting and Applying)
- 1.9 WALT/WILF – We are learning to, What I'm looking for

## 2. Purpose:

To provide a rich and challenging program which aims to promote a positive attitude towards Mathematics and provide students with the opportunity to:

- 2.1 acquire mastery of mathematical skills and knowledge so they can deal confidently and competently with academic and daily life;
- 2.2 interpret and communicate quantitative and logical ideas accurately;
- 2.3 recognise that Mathematics enables us to make sense of the world around us;
- 2.4 understand that Mathematics has three interrelated components: concrete, symbolic and abstract and
- 2.5 explore mathematical concepts and construct meaning in authentic, relevant, challenging and trans-disciplinary contexts.

## 3. Guidelines

- 3.1 Coatesville PS will provide a balanced and sequential Mathematics program based upon AusVELS 2016 / Victorian Curriculum 2017 and the IB-PYP expectations and is consistent with Victorian DET guidelines.

- 3.2 The *AusVELS 2016 / Victorian Curriculum 2017, Kath Murdoch Inquiry Model, the Key Characteristics of Effective Numeracy Teaching* the DET website and ACARA website will be used to support teachers in developing high quality instruction in Mathematics.
- 3.3 Teacher's own understanding of Mathematical instruction will be maintained through regular professional development and experiences such as professional dialogue, collaborative planning, readings and online.
- 3.4 The Mathematics program will be differentiated to cater for individual needs with the consideration of differences in ability and teach to point of need.
- 3.5 Mathematics will be authentically incorporated into all of the six IB-PYP Transdisciplinary Themes through Units of Inquiry (UOI).
- 3.6 In accordance with the IB guidelines the Mathematical strand of Number and Algebra will always be taught as a stand-alone program. This ensures students master the necessary skills to transfer these understandings when Acting and Applying.
- 3.7 Support learners from Indigenous and non-English speaking backgrounds.

#### **4. Implementation**

- 4.1 Mathematics (*Number and Algebra, Measurement and Geometry and Statistics and Probability*) instruction is implemented daily across the school. A minimum of five hours of Mathematics is taught per week both through explicit teaching and Units of Inquiry.
- 4.2 The development of mathematical thinking is supported through Learning@Home (refer to Learning@Home Policy).
- 4.3 Implementation of the Mathematics program is based upon AusVELS 2016 / Victorian Curriculum 2017 expectations, students' point of need, IB Scope and Sequence documents and the Coatesville IB-PYP Programme of Inquiry.
- 4.4 Teachers collaborate within their Grade team to develop and implement a Mathematics program for students that ensures all three components (concrete, symbolic and abstract) are represented.
- 4.5 The Leading Teacher is responsible for the organisation, resources and annual budget for the Mathematics program across the school.
- 4.6 The Leading Teacher is responsible for parent education and will promote Mathematics to the school community through workshops and Communicator articles.
- 4.7 Teachers clearly display a Learning Intention' and 'Success Criteria' for each lesson, which is shared and/or developed with the class (WALT/WILF – Prep – Grade 2).
- 4.8 Students are assessed at regular intervals, as per the Coatesville Assessment Schedule (Prep to Grade 6) which is reviewed annually. Student achievement levels are recorded and housed electronically. This data individually tracks all students and is accessible by teachers.
- 4.9 Student progress will be reported in mid-year and end of year Student Reports. Teacher judgements and cohort data is shared via the school's Annual Report.
- 4.10 Students reflect on their learning throughout the year and collate their achievements in their individual student portfolio. Students share their progress at student led conferences held annually.
- 4.11 The school provides opportunities for students to participate in local, state and national competitions and programs where appropriate.

#### **5. Evaluation:**

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

**This policy was last ratified by School Council on 30 August 2016**