



Mathematics Policy

Rationale

At Bletchley Park Primary School, we believe Mathematics is an essential part of everyday life. For students to be confident, successful learners and active participants in their world, they need to develop mathematical knowledge, skills and understandings to be able to think creatively, analyse and communicate information and ideas.

Aims

Our school has adopted the aims developed by the Australian Curriculum: Mathematics. To ensure that students:

- are confident, creative users and communicators of Mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens
- 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*
- recognise connections between the areas of Mathematics and other disciplines and appreciate Mathematics as an accessible and enjoyable discipline to study.

Planning

Mathematics overviews are used in each learning team, which outline the objectives that need to be taught each term. Learning teams plan together to ensure teaching connects with, and challenges students' present knowledge, skills and values. Teachers need to base their planning on First Steps in Mathematics stages of development aligned to the Australian Curriculum and use the ISTAR model for the planning of Numeracy Blocks.

Timetabling

At Bletchley Park Primary School, a minimum of six hours each week is dedicated to the teaching of Mathematics. This is delivered in one hour or two hour blocks of time to accommodate the ISTAR planning model and inclusion of fluency activities as part of each lesson.

Learning

Students should be provided with a variety of learning opportunities that enable them to build on their existing experiences and strengths and acknowledge different learning styles. Learning should be meaningful and purposeful and involve students in both doing and reflecting. Students need to regularly experience opportunities for both individual and collaborative learning and teachers must ensure all students are given the opportunity to achieve intended outcomes in a safe and fair environment.

Fluency

All teachers **must** dedicate 10 minutes every day to practising mathematical fluency skills. Fluency is a vital opportunity for children to learn and consolidate their knowledge of key mathematical facts and practise recalling these efficiently and accurately. This is important for progress in Mathematics because knowing facts frees up a child's working memory. Fluency sessions must incorporate a range of maths areas and not just focus on the four number operations. Bletchley Park Primary School has developed a Fluency Scope and Sequence for number activities and each teaching block has a set of Paul Swan resource books with additional teaching ideas.

Numero

Numero is taught by all teachers in Years PP-6. It is a mathematical card game that has been designed to assist in developing understanding of numeracy concepts and build problem solving skills. It can significantly boost children's mental maths abilities and encourages tactical thinking. The skills in the game must be explicitly taught and modelled to the children. Bletchley Park Primary School incorporates this game into the teaching of mathematics and some classes pair up to practise game skills.

Calculation Strategies

A key component of mathematics teaching at Bletchley Park Primary School is the development of student's mental and written calculation strategies. There is a school scope and sequence for the teaching of these strategies and time is set aside for teaching and consolidation of these skills. A set of calculation posters has been developed to show how each strategy must be taught in the classroom and these must be followed by teachers to ensure strategies are taught consistently across the school. The attached posters show the progression in teaching the skills and do not need to be displayed in the classroom. There are many games and resources to support the implementation of this in the classroom.

Resources

Bletchley Park Primary School supports a hands-on, student-centred approach to teaching Mathematics and is well resourced to support this. Each classroom has access to a well-equipped resource box and each learning team has shared resources. The library has a collection of Mathematics story books which provide meaningful contexts for teaching and also a link to real life application. There are also teaching support materials and past NAPLAN papers kept in the library.

Assessment

Assessment schedules are used by each learning team and provide a clear and consistent method of monitoring children's progress. These schedules include A-E grading taken from the SCSA judging standard and a number of assessments related to each mathematics objective. Each learning team works together to determine which assessments are compulsory based on the needs of teaching. The timing of assessments is given thought and teachers must ensure that some time has passed between the learning of a concept and the actual assessment. Every assessment should have a clear purpose either to act as a diagnostic, inform future planning or to gather data for reporting. Time is set aside during team meetings to moderate tasks and monitor teacher grading.

During Term 3, a whole school Mathematics audit is planned where classes will complete the one minute maths tests and EMTS test.

Reporting to parents

- Two summative reports
- Parent/Teacher interviews
- NAPLAN reports – Years 3 and 5
- On Entry reports – Pre Primary, Year 1 and Year 2
- Case Conferences – development of Teaching and Learning Adjustments (TALAs) for individuals and groups

Parent Education

Parents will be invited to attend and participate in Mathematics information sessions e.g. Numero workshops. Teachers will include information about their Mathematics program at Parents Information Meetings at the commencement of the school year.

Role of the Mathematics Coordinators

- Lead, manage and monitor the implementation of the Mathematics Curriculum
- Build up resources and ensure all staff have access to materials and equipment
- Provide support to teams and individual staff members
- Provide professional learning workshops for staff as needed
- Ensure that mathematics remains a high profile in school
- Discuss regularly with the leadership team the progress of implementing the Maths Policy within the school
- Collect whole-school data and set targets for improvements
- Lead the Maths committee

Role of the Mathematics Committee

- Attend scheduled committee meetings and provide information about the teaching of mathematics in their year group team
- Feedback vital information from committee meetings to the year group team
- Offer ideas and opinions to discussions regarding whole school mathematics development

Mathematics coordinators

Heather Faulkner - Kindy – Year 2

Catherine Thurman - Year 3 – 6