



Mathematics Policy

Rationale:

At St Peter's, we believe that Mathematics is a vital component to the education of our students. This equips them with the skills, understanding and strategies so that they are inspired and enabled to flourish and enrich the world as educated and informed citizens. Research highlights that often students do not view themselves as capable in mathematics and can experience a high level of mathematics anxiety, however, we believe that all students can experience success in mathematics given the right experiences, time and support. We aim for all students to be confident, proficient, effective and adaptive learners of mathematics through the implementation of a learning and instruction program that is evidence informed on how students learn most efficiently and effectively.

Principles:

At St Peter's we aim to provide a Mathematics program that incorporates:

- A *collaborative and empowering* learning environment in which students can explore and *apply* mathematical knowledge, skills and processes
- Consistently *high expectations* of all students that can be achieved through *challenging yet accessible* learning experiences within Number, Algebra, Measurement, Space, Statistics and Probability
- A *student centred* learning approach, where students have to think critically and problem solve to create new understandings
- Learning experiences that *promote student engagement* through *real world contexts* highlighting the fundamental importance of mathematics in everyday life
- A *differentiated* learning approach, which *caters for all students* at their *point of need*, ensuring *all students experience success*

Goals:

The Victorian Curriculum and student data informs and guides the planning of Mathematics to ensure all students achieve success. At St Peter's we aim for our students to:

- Achieve a deep conceptual understanding of Mathematics, seeing the relationships between different content and the ability to apply their knowledge to new contexts



- Develop a *growth mindset*, where they demonstrate *persistence* within challenging mathematical tasks, show *resilience* as they *learn from mistakes*, try *different strategies*, and *seek feedback* to continue to develop their abilities in mathematics
- *Be effective communicators*, who can *collaborate* with their peers by engaging with others' thinking as well as explain and justify their own *reasoning*
- Feel *empowered* to have agency of their own mathematical learning and goals, as they become flexible and creative thinkers
- *Flourish in confidence* and have a positive disposition towards mathematics, demonstrating *self-confidence* and an understanding that *everyone can achieve success*

Implementation:

At St Peter's we:

- Plan for the strategic and scaffolded implementation of the Victorian Mathematics Curriculum 2.0 across the school year
- Collect and analyse evidence and data on students' current understanding and skills before developing a unit to plan for learning experiences that cater for all students' points of need
- Use pre and post assessments and work samples to monitor student growth
- Plan units of work that embed a student centred learning approach, providing students with experiences before instruction
- Collaboratively plan in our year level teams, supported by the Numeracy Leader, including anticipating students' strategies and misconceptions in order to be strategic in the support offered to each student
- Ensure differentiation within tasks by planning enabling and extending prompts that allow all students to engage in the learning experience.
- Utilise a variety of effective instruction strategies to actively engage all students in the learning including; investigations, challenging tasks, games and real life contexts
- Develop collaborative classroom cultures, embedding productive classroom discourse strategies such as talk moves to develop critical and creative thinking, and students personal and social capabilities
- Scaffold new learning for students, including modelling and hands on learning experiences, to move from concrete, to visual and then to abstract representations and thinking
- Provide opportunities for students to collaborate on tasks and give, receive and apply peer feedback



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PRIMARY SCHOOL

- Encourage students to learn from and with each other through the strategic use of spotlighting to showcase students thinking
- Formalise students learning through teacher modelling, visual representations, and mathematical language development
- Strategically scaffold each students' learning by asking questions to assess and advance their thinking and providing timely feedback to help students' progress
- Target small group and individual students learning needs through sprints, focus groups, intervention and extension groups where appropriate.
- Provide opportunities for students to revisit and consolidate prior learning and develop fluency through daily games and warm up activities.
- Monitor trends in whole school/cohort data sets to evaluate the effectiveness of our teaching programs, through the implementation of our whole school assessment schedule, utilising whole school data tracking tools and data walls for analysis
- Continue to embed best practices in the teaching of mathematics across the school through regular professional learning including PLTs, and job embedded professional learning opportunities through professional practice release (modelling, observation, team teaching etc) to give and receive feedback on practice