WRITTEN STATEMENT/POLICY

English

Elsternwick Primary school is well resourced with a rich and varied collection of Reading materials. During 2017 Elsternwick PS has been fortunate to have professional development with renowned Literacy educational consultant Diane Snowball. Developing Classroom Libraries is a focus in 2017 with new shelving purchased for all classrooms to house a huge selection of texts designed to engage all children as independent readers.

A range of teaching strategies are used within the daily Reading block which includes a focus mini lesson followed by application of the skill taught during independent reading or in guided groups. Mini lessons may include shared reading experiences, read a-louds, modelled reading, interactive reading and focus teaching of comprehension strategies using a range of traditional and digital texts.

Teaching conferences with individual students are held regularly to set reading goals, discuss reading progress, provide on the spot teaching and check the range of text types read. Assessment using Fountas and Pinnell Benchmarking materials tracks the progress and growth of reading levels and comprehension skills. This data is used when planning for the coming term to ensure comprehension and fluency needs underpin classroom work.

The teaching of Writing at Elsternwick Primary School is based on a range of research into best practice. The '6 + 1 Traits of Writing' by Ruth Culham is the main text referenced by teachers and the knowledge and practical application of this work is embedded through professional development sessions with writing consultant, Brenda Leonard.

Writer's Notebooks are also a feature in most year levels as a tool for students to gather, keep and develop Ideas. Teachers use 'Mentor Texts' to engage their students and support them to notice the author's craft related to the focus lesson. The '6 + 1 Traits of Writing' include the gathering, keeping and nurturing of Ideas, careful Word Choice, developing Voice, the power of Sentence Fluency, need for Organsation and the importance of Conventions and Presentation.

Throughout their primary school years, EPS students progressively take more ownerhip and responsibility for their writing, making decisions about the style of their writing depending on its purpose and the intended audience.

Speaking and Listening are embedded in most classroom activities. As students progress through the school they learn to become active listeners, listening for particular purposes and to use a variety of strategies when engaging in group and class discussions.

Students learn the skills of collaborating, listening for key points and using this information to carry out tasks. They learn to express their opinions and respectfully consider others' opinions. Students begin to ask clarifying questions and challenge others' ideas. They plan for and create detailed spoken texts, elaborating on key ideas for a range of purposes and audiences.

Digital Technologies Overview for School Review

In the early years, to the end of Year 2, students have opportunities to learn about common digital systems and patterns that exist within data they collect. Students organise, manipulate and present this data, including numerical, categorical, text, image, audio and video data, in creative ways to create meaning.

When solving problems, students learn to identify the most important information, such as the significant steps involved in making a sandwich or getting ready for school. They begin to develop their design skills by developing algorithms as a sequence of steps for carrying out instructions, such as identifying steps in a process or controlling robotic devices or sprites in Scratch.

Students also describe how information systems meet information, communication and/or recreational needs. Through discussion with teachers, students learn to apply safe and ethical practices to protect themselves and others as they interact online for learning and communicating.

Students in Years 3&4 further develop their understanding and skills in computational thinking, such as categorising and outlining procedures; and developing an increasing awareness of how digital systems are used and could be used at home, in school and the local community.

Students also have opportunities to create a range of digital solutions, such as interactive adventures that involve user choice, modelling simplified real world systems and simple guessing games.

They explore digital systems in terms of their components, and peripheral devices such as digital microscopes, cameras and interactive whiteboards. Students also collect, manipulate and interpret data, developing an understanding of the characteristics of data and their representation.

Students define simple problems using techniques such as summarising facts to deduce conclusions. They record simple solutions to problems through text and diagrams and develop their designing skills from initially following prepared algorithms (sequence of steps) to describing their own that support branching (choice of options) and user input. Their solutions are implemented using appropriate software including coding languages that use graphical elements rather than text instructions.

With teacher guidance, students identify and list the major steps needed to complete a task or project. Students learn to use Google Classroom and other Google Apps to share ideas, collaborate on tasks in real time and communicate in online environments. They develop an understanding of why it is important to consider the feelings of their audiences and apply safe practices and social protocols agreed by the class that demonstrate respectful behaviour.

In Years 5&6, students continue to develop their understanding and skills in computational thinking such as identifying similarities in different problems and describing smaller components of complex systems. It also focuses on the sustainability of information systems for current and future uses.

Students will have had opportunities to create a range of digital solutions, such as games or quizzes and interactive stories and animations and websites through their knowledge of coding languages.

Students also develop an understanding of the role individual components of digital systems play in the processing and representation of data. They acquire, validate, interpret, track and manage various types of data and are introduced to the concept of data states in digital systems and how data are transferred between systems.

They learn to further develop abstractions by identifying common elements across similar problems and systems and develop an understanding of the relationship between models and the real-world systems they represent.

Students also use their knowledge of coding and problem solving to create solutions. They define problems clearly by identifying appropriate data and requirements. When designing, they consider how users will interact with the solutions, and check and validate their designs to increase the likelihood of creating working solutions. Students increase the sophistication of their algorithms by identifying repetition and incorporate repeat instructions or structures when implementing their solutions through visual programming, such as reading user input until an answer is guessed correctly in a quiz. They evaluate their solutions and examine the sustainability of their own and existing information systems.

Students progress from managing the creation of their own ideas and information for sharing to working collaboratively. In doing so, they learn to negotiate and develop plans to complete tasks. When engaging with others, they take personal and physical safety into account, applying social and ethical protocols that acknowledge factors such as social differences and privacy of personal information. They also develop their skills in applying technical protocols such as devising file naming conventions that are meaningful and determining safe storage locations to protect data and information.

Mathematics

How do we help students build their mathematical literacy and problem solving capabilities from Prep to Year 6? This question has become a whole school focus and is represented as one of our main goals in this year's Annual Implementation Plan. We are very fortunate to have the opportunity to work with leading researchers in education from the University of Melbourne to help us achieve our goal. Last week we heard from John Hattie (Professor of Education and Director of the Melbourne Education Research Institute at the University of Melbourne) who presented a thought provoking speech and whose latest book, 'Visible Learning in Mathematics' (2017) provides a great insight into the deep thinking skills required in the subject area.

The University of Melbourne's Network of Schools program (UMNOS) is a 3 year project which we are a part of and are in our 2nd year. Each term the leadership team attends lectures and workshops with other schools to listen and engage with the latest research about highly effective teaching and learning practices. It's an exciting opportunity and privilege to be part of the UMNOS project and what's even more exciting is to be able to feed- back what I've learnt from the seminars, in after school workshops with the whole staff.

The focus for last week's whole staff UMNOS workshop was to explore what problem solving looks like in classrooms. Teachers brainstormed in their year level teams (Years 3&4 together and Year 5&6 together to support multiage classes) and from this we were able to discover what we believe as a school, effective problem solving practices look like.

These workshops will continue throughout the year and is a great example of how we, as teachers are continuing to employ a positive growth mindset towards the teaching and learning of all curriculum areas and in this example, problem solving in Mathematics.
As explained our growth mindset in Mathematics is used in classrooms, through our class norms.

All classes work with a set of research based Mathematics norms which help to develop a positive attitude towards learning. (Jo Boaler, Prof. of Mathematics Stanford University, 'Mathematical Mindsets', 2016).
- *Mathematics Classroom Norms*
- *Everyone can learn Mathematics to the highest levels*
- *Mistakes are valuable*
- *Depth is more important than speed*
- *Questions are really important*
- *Mathematics is about creativity and making sense*
- *Mathematics is about making connections and communicating your thinking*
- *Mathematics is about recognising our learning and growth not just performing*