Gilles Street Primary School Maths Agreement

SCHOOL CONTEXT

Gilles Street Primary School is a reception to year 7 school with a mainstream and Intensive English Language Program.

Gilles Street students thrive in a learning environment that is success orientated, supportive and challenging for each student.

GSPS is a part of the Adelaide-Prospect Partnership and is Category 6 of disadvantage.

Current enrolment across the whole school is approximately 410 students.

PURPOSE

This document outlines the agreed vision, approaches and common understandings that underpin the teaching of mathematics and its application into numeracy for students attending Gilles Street Primary School.

The Whole School Agreement ensures a consistent approach and language is used across the site and that all teachers are confident and competent with consistent pedagogy.

RATIONALE

To be numerate is to have the confidence, capacity and positive mindset to apply mathematical knowledge to daily life and real problems.

Staff at Gilles Street Primary School will have high expectations for all students. We believe that all students can make at least one year's growth in each school year.

We are committed to building the capacity of teachers, so they are able to design high quality learning experiences that engage and challenge all students.

Curriculum

Australian Curriculum: Mathematics is organised around four proficiency strands and three content strands.

Proficiency Strands describe how the content is explored or developed. They are the verbs of mathematics:

- Understanding (knowing why)
- Fluency (knowing how)
- Problem solving (finding out how)
- Reasoning (explaining how)

Content Strands describe what is to be taught, and are grouped as:

- Number and Algebra
- Measurement and Geometry
- Statistics and Probability

Each year level has an **Achievement Standard**. This summary of the year's learning describes a 'C' for the teacher to make their on balance judgement of A – E grading for each formal reporting period.

The **National Numeracy Progressions**, describe the progression of skill development required for students to gain mastery in each concept.

The Australian Curriculum: Mathematics – **Glossary** is the mandated reference point for standard terms and definitions.

Programing

At Gilles Street Primary School we believe that a consistent approach to the teaching of mathematics is crucial to the constant growth of students.

All classroom teachers will plan for:

- 300 minutes of maths lessons per week
- 180 minutes per week focussing on the Number & Algebra strand
- 120 minutes per week focussing on Measurement & Geometry *or* Statistics & Probability
- Links between the Number & Algebra learning and that of the other strands that occurs each week
- Intentional planning targeting teaching of Problem Solving proficiency strand each week
- One common, strand based, year level summative task completed per term.

(Variations to this planning structure are acceptable after negotiation with a line manager)

Government of South Australia — Department for Education

High Impact Teaching Practice

Targeted Differentiated Teaching: Teachers will build on what each individual learner knows and use this information to identify and scaffold future learning needs. They will use data to inform stretch and enrichment priorities: and track and monitor progress and efficacy.

Logical and Intentional Sequencing of Lessons: Teachers will build connections in learning using well sequenced, manageable and intentional steps; vary the steps according to student needs, support students to develop their own learning goals, and support the gradual expansion of skills and knowledge in each child

Clear Learning Intentions & Linked Success Criteria: Staff will develop and communicate clear learning intentions for a sequence of learning. Students will know what is expected. Goals are specific and challenging, success criteria are explicit and learners understand what success means.

Feedback: Teachers will provide timely advice and actionable feedback for all students, including next steps in learning. Formative assessment may include peer, small group and individual feedback.

Explicit Teaching: Teaching practice will model the process students need to undertake, correct misconceptions, promote cognitive strategies, teach sequentially and allow practice time.

Underpinning Philosophy

Understanding of the 'Big Ideas in Number' will underpin teaching and learning of mathematics at Gilles Street Primary School.

Mastery of these building blocks will result in reduced cognitive load, allowing smoother progression through the Australian Curriculum: Mathematics and increased ability to apply learning to real life scenarios. All staff will be trained in the implementation of this work within their first year at Gilles Street PS.

Big Ideas in Number – Scope & Sequence	R	1	2	3	4	5	6	7
Trusting the Count – developing flexible mental objects for the numbers 0 – 10								
Place Value – the importance of moving beyond counting by ones, the structure of the base 10 number system								
Additive & Multiplicative Thinking – developing efficient mental written computation strategies								
Partitioning – building common fraction / decimal knowledge and confidence								
Proportional Reasoning – solving problems involving fractions, decimals, percentage, ratio, rate and proportion								
Generalisation – engaging with broader curricula expectations								

Monitoring Student Progress

Student progress is monitored by collecting a range of data through different processes which may include:

- Evidence collections – Formative assessment, rubrics, anecdotal data, observations, photographs, checklists
- Summative data to inform teaching & learning goals have been met
- Reporting to parents (interviews term 2, written reports, term 2 & 4)
- Staff to engage with moderation processes to ensure collective judgement and expectations are similar across the school

Assessment & Data Collection Schedule	R	1	2	3	4	5	6	7
Schedule for Early Number Assessment (1 & 2)								
Big Ideas in Number – Trusting the Count								
NAPLAN (Term 2) SEA Band				3		5		7
PAT Maths (Term 3) SEA Score				101	110	112	120	121
Big Ideas in Number (Place Value)								
Booker et al Screening Tests								
Big Ideas in Number (Additive & Multiplicative)								
Big Ideas in Number (Partitioning)								
Big Ideas in Number (Proportional Reasoning)								
Big Ideas in Number (Generalisations)								
School based moderation								

Supporting Documents

Please see appendices for *GSPS* 'I can…' statements across Proficiency and Content Strands, Year level specific National Numeracy Progressions, planning templates, Big Ideas explanation and resource lists.