



School Name:	Mokau School
School Number:	2200

Mathematics

Strategic Aim:	To ensure all students are able to access the New Zealand Curriculum to the very best of their ability.
Annual Aim:	To ensure that all our students are making progress and that students, where possible, are working towards making accelerated (more than a year's progress) for their year level.
Target:	Mathematics At the beginning of 2018 100% of students (3 Māori [2ORS], 1 European) at Mokau School were identified as being below their age level in mathematics. These students all needed to make accelerated progress during 2018.
Baseline Data:	<p>Mathematics : As a result of the analysis of beginning of the year testing all students were identified as priority learners as they were not meeting the recommended achievement levels for mathematics as set in the New Zealand Curriculum.</p> <p>Year 2 : 1 Māori student (ORS very high) Year 3 : 1 Māori student Year 5 : 1 Māori student (ORS high) 1 European student</p> <ul style="list-style-type: none"> • One student (ORS very high) was non-verbal and working within Te Whariki ECE curriculum. He could not be placed on the NZC progressions. The remaining three students spread across year two to five were performing within level one of the NZC in Reading. Of these students three were Māori and one European. All of these target students are boys. • Target students in Year 1-4 had barriers to learning (behavioural issues) and were not engaging in the learning program and/or assessment activities. All the students in this group need to build number confidence such as place value and ordering & sequencing numbers before working on addition and subtraction strategies. Two of these students (ORS students) have IEP plans and goals.

Actions <i>What did we do?</i>	Outcomes <i>What happened?</i>	Reasons for the variance <i>Why did it happen?</i>	Evaluation <i>Where to next?</i>
<p>1. Initial data was reviewed to determine the particular learning needs of the current students and priority students were identified as those students achieving below the standard for their year level.</p> <p>2. Teacher inquiry goals centred round these priority students with adaptation of teaching practice to cater for their learning needs</p> <p>3. Broader opportunities using an online learning tool 'GoNoodle' were used in the classroom and as extra curricula activities to support learning. This involves movement and music to help with retention of concepts.</p>	<p>Deliberate acts of teaching to address student deficits in learning</p> <p>Responsive planning and curriculum delivery</p> <p>Actively planning to meet the needs of priority learners including one-on-one and small group learning was effective</p> <p>All students displayed less resistance to maths when learning with movement.</p>	<p>We are finding 'slip back' of learning over holiday periods, especially for target students over the holiday breaks. For these students learning must be consistent and constant for learning to be cemented with cyclical revision of concepts and plenty of time for independent practice.</p> <p>Teacher inquiries focused strategies for helping individual students and enabled timely reflection of the effectiveness of mathematical strategies taught</p> <p>Some students are more self-motivated than others. The student who joined us late term three was at first resistant to this open display of dance and music but he has now settled to the programme and is enjoying this physical approach to learning.</p>	<p>Continue to consistently use assessment data observations to drive learning intentions to address areas of need.</p> <p>Consistently revise concepts covered to ensure learning is retained. Responsive planning and curriculum delivery is vital.</p> <p>Continue to have priority learners as focus for teacher inquiries for timely reflections and adaptation of teaching practice to suits their needs</p> <p>Continued school funding of GoNoodle for all students as it is not specific to mathematics but also good for literacy learning and social skills.</p>

4. The Learning programme for the year 5 student centred on cementing basic facts for instant recall and knowledge. Also, place value as a foundation for learning in the other strands, as well as elements in the strands highlighted as areas of need from standardised testing.

5. Work was tailored for the different numeracy stages with sequential associated activities relevant to the individual's ability.

The priority learner in Year 5 made progress and is now working at early level two. Continued emphasis is being placed on number knowledge of number sequence an order, place value and basic facts.

2 are ORS students with IEP goals working one-on-one with Teacher Aides leaving another 2 priority students.

These students are continuing to work at level one and are building their understanding of basic addition and subtraction.

The multilevel classroom aided the progress of all target students as they were able to work alongside similar ability students to make steady progress.

All of the students have some way to go before they reach age parity but they are displaying an increased mathematical confidence, they enjoy the maths program and are developing the foundations to continue to make progress.

Steady sequential learning has enabled students to make steady progress. We need to continue to address issues for our younger students to engage them in the learning program for longer periods of time and then allow independent monitored practice with lots of repetition - both in paper form, e-learning and hands on activity opportunities.

Continue to build knowledge and strategies for target learners to increase their mathematical confidence and address any areas of need identified through assessment.

Continue with small group and individual sessions to gradually introduce next steps and new concepts. Keep revising concepts to ensure the new learning is retained

Continue to work with Special Ed and Whanau for best possible educational outcomes for the students. Teacher and Teacher Aides need to develop maths program to achieve IEP goals for individual students.

End of the year data was analysed to determine the progress of target students and summarise learning needs for 2019.

There are now 5 students at Mokau School - one new enrolment in March and another in October.

Note: ALL students are from the one family.

End of 2018

Mathematics: 60% (3 students) of students are working at level one of the NZC which is well below their chronological age. 20% (1 student) is working at level two which is well below his chronological age. 20% (1 student) is working at level one which is age appropriate.

Year 1: 1 Māori girl

Year 2: 1 Māori boy - ORS very high needs

Year 3: 1 Māori boy

Year 5: 1 Māori boy - ORS high needs

1 European boy

The projected roll from day one, term one 2019 will be NINE students

Year 1: 2 boys

Year 2: 1 girl

Year 3: 1 boy

Year 4: 1 boy

Year 5:

Year 6: 1 girl, 2 boys

Year 7:

Year 8: 1 girl

2018 Learning Outcomes

Whole School

All four students at Mokau School at the beginning of 2018 were remedial and in need of extra assistance to support their learning. One left in mid-February reducing the roll to three. The remaining children are siblings who live in the local village. Two of these children are ORS students with high and very high needs respectively. One of these children is non-verbal. They are both working on IEP programs supported by Teacher Aides and a (0.3) Specialist Teacher. The third child has extreme anxiety and resistance to reading and writing. He has difficulty containing his anger and frustration and a referral was made to MoE for support. This was accepted and actioned in December 2018. Staff have continued to work with outside agencies and address barriers to learning and adapt teaching practice to suit these student's learning and social needs.

Outcomes this year show that all of these students continue to have extreme difficulties in their learning but pleasing progress has been made within curriculum levels.

- Their younger sister joined us in March 2018 and she is progressing well in her learning. At this stage she has no identified learning needs that require extra assistance. However, she has been included in the same programmes that have been established for her siblings. Good progress is evident here.
- Another brother has joined the family and is now living with them in Mokau. He was excluded from his last school and has come to live with his father full time. This has been a positive move for him and he has settled well. He has high anxiety and resistance to learning. His learning needs are similar to those of his brothers. Fortunately he has responded positively to the classroom programme.

Assessments for these children has been made using daily observations, standardised assessments, formative assessments and OTJs. Standardised assessments are not always suitable for the needs and abilities of these children. Flexibility and a good understanding of the needs of these children is required in order for them to progress to the best of their ability.

Evaluation - What next?

An intensive program needs to be developed for these learners to engage them into learning by breaking down emotional and behavioural issues. Teacher Aide support for their learning is vital. Text based, music, movement and hands on practical activities should continue to be included daily as these have all proven to be effective for these students. Routine and structure is important for these children and although there can be resistance, they all enjoy mathematics. They need an exciting, stimulating learning environment to engage them in their learning.

Planning for next year:

Planning for 2019: The target group of boys from 2018 will continue to be priority learners in maths.

Based on end of year in 2018 testing **the priority learners in mathematics 2019 will be:**

Year 1	
Year 2	
Year 3	1 boy
Year 4	1 boy
Year 6	1 boy
	1 boy
Year 6	Māori - ORS high needs
Year 7	
Year 8	

- The priority learning focus will be to raise the achievement level of our 4 learners from the same family with high learning needs (Year 3, 4 & Year 6). Two of these students have Teacher Aide hours and 0.3 Specialist Teacher support from Arahunga. One has received verification of MoE support to be actioned and the other has SWIS and STANZ support in place. RTLB could be another agency involved if the new Principal wishes to follow through with the referral process.