

# **Analysis of Variance Reporting**



School Name:	Sumner School	School Number:	3546
Strategic Aim:	To raise the achievement of Year 8s in maths.		
Annual Aim:	To accelerate the progress of 4 children who are	e <i>below</i> standard to a	at standard in maths.
Target:	By the end of 2017, four Year 8 students current National Standard (Level 4b) for maths.	tly assessed as <i>belo</i>	w National Standard (Level 3a) will be working at
Baseline Data:	Analysis of the end of year data from the Nation working <i>below</i> the National Standard in maths. I students with special needs and are currently rethey won't be targeted for additional intervention	t is important to note eceiving an individua	



#### Tātaritanga raraunga



### Actions What did we do?

Children will be set weekly SMART targets based on gaps in number knowledge and strategy. These will be identified from self/assessment of children's prior knowledge.

Learning will be 'flipped' using Mathletics. Children will be required to complete pre-workshop activities, tutorials and explore new concepts using assigned tasks and demonstrations in Mathletics.

Strategy learning will be 'flipped' requiring children to watch videos (Teacher Tools) of new learning and complete practise activities before attending teacher led workshops.

## Outcomes What happened?

When analysing the end of 2016 data to identify the students within this Focus Group for the year we identified 7 students who were working *below* the standard that we would expect for their age. This was then narrowed to focus on 4 students as 3 of the initial 7 students were identified as students already receiving additional intervention within their Individual Education Plans. However, all 7 students remained at the forefront of our thinking throughout the year and received a programme that was responsive to their learning needs.

This additional focus has resulted in us exceeding our initial target with 6 out of the 7 students now working at the the standard that we would expect for their age. The student who didn't achieve the target was one of our students working under an IEP. They made

# Reasons for the variance Why did it happen?

The use of weekly SMART targets for students was particularly successful. This allowed us to be responsive to our students' ongoing learning needs and make changes to their learning programmes as needed. We focused on developing and utilising a bank of different formative assessment tools that allowed us to quickly and effectively identify the student's next steps in learning.

Much of the year focused around finding the gaps in knowledge for these students and then working to scaffold new learning in order to break down their barriers. The students went through a process of revising and practising the application of new learning until they felt confident in applying this independently to a variety of contexts. This allowed us to be responsive to our students' needs

## Evaluation Where to next?

As a school we will continue to explore the use of the Flipped Learning pedagogy and how making learning visible and accessible to students can support student achievement.

This Focus Group inquiry has reinforced to us the strength in providing a really responsive and personalised programme for our students. This has allowed us to reflect on how we will plan our programmes in the future so that they continue to be driven by the needs of our students.



#### Tātaritanga raraunga



Students will complete daily basic facts timed challenge to develop quick recall of add/sub/mult and div facts. An emphasis will be placed on division.

Home Learning will have an emphasis on basic facts using 'Live Mathletics'.

Students mathematical vocabulary will be developed so that they understand what different terminology means.

solid progress, but the rate of acceleration was not enough for them to achieve the target.

Ongoing reflection of this student's progress and achievements highlighted that retention and independent application of processes remained a barrier to their learning.

by making conscious decisions about the content and pace of the programme.

The use of the Flipped Learning pedagogy allowed us to personalise the pace of the programme for our students, whilst also allowing them to actively engage in their learning journey. All students had access to their learning digitally (using video tutorials, 'how to' resources and additional practise) via the school cloud, allowing them to recap and revise learning as needed. Having these resources at students' fingertips saw a marked increase in their confidence and more of a willingness to take risks.

Additional focus on the language of maths and the student's understanding of this allowed us to break down the comprehension barriers for students, meaning they could focus on the 'maths behind the words'.







#### Planning for next year:

We have been very successful in reaching our target with this group of students. As they are Year 8 students and have now moved onto High School our next steps will not be applicable to them. The findings from this Focus group however, will be shared with staff and together we will continue to explore how Digital Technologies can be used to support and personalise our learning programmes for our students. This document and our reflections will also be shared with our BoT who are invested in supporting us to develop our use digital technologies.