

## STUDENT ACHIEVEMENT TARGET: ACTION PLAN 2007

<b>Strategic Goal:</b> <i>We will raise student achievement in Numeracy</i>		<b>Target Area:</b> <i>Numeracy</i>	
<b>Annual Target:</b> <i>We will increase student achievement (knowledge and strategies) to MOE expectations for Year 3 (working at Stage 5) and Year 5 students (working at Stage 6).</i>		<b>Student Group</b> <i>Year 3 and Year 5 students</i>	
<b>Historical Position:</b> <i>In 2006 teachers in the senior school attended the Advanced Numeracy Project and introduced the numeracy model. This model now operates throughout the school. In 2007 we will focus on numeracy to measure the effect of this model on student achievement and to consolidate our teaching and learning of numeracy through on-going staff professional development.</i>			
<b>Action Plan:</b>			
What will the school do to meet the target?	When will it be done by and who will do it.	Review	What resources will be allocated to meet target?
1. Identify lead teacher and allocate management unit	December 2006	Ilisa and Jo assigned to lead numeracy initiatives. Designated MU assigned to Ilisa for 2 terms.	1 management unit for 2 terms
2. Participate in a numeracy sustainability programme	All year Ilisa and Jo to attend workshops and lead staff PD sessions	Both Ilisa and Jo attended Numeracy Sustainability programme meetings with UC advisors, worked with advisors in school, planned and presented staff development sessions.	Release time. Some course costs. Staff meetings
3. Assess student achievement levels	March 2007 All staff	All students assessed. Data for Yrs 3 and 5 analysed.	CRT. Numeracy testing resources. Extra release for Yr 3 and 5 teachers.
4. Analyse achievement data to determine achievement levels, identify gaps and establish specific targets for year 3 and year 5 students	April/May 2007 Peter, Ilisa, Jo, Carolyn	Data analysed and targets refined in early May. Our expectations aligned with MOE guidelines.	Release time. Include whole staff discussions
5. Conduct staff PD sessions. Train teacher aides to apply numeracy programme for needs and extension.	March, June, September, November. Ilisa and Jo to lead	PD sessions held as per programme of PD. Eight sessions held during the year.	Teacher PD afternoons and Southpower meetings
6. In-class observations and support of teachers	Terms 2-4 Lead teachers and all staff	Some observations done. Was not a focus of QLC.	Release time. Possible focus for QLC

7. Conduct parent education	Terms 2 and 3	Parent evening held in August. This included workshops to train parents in working with numeracy model at home. Numeracy resources and links posted on school website.	Parent evening, coffee morning, website page
8. Assess students in cycles 2 and 3 and record data on Integriss	June/October	Cycle two and three assessments completed and analysed.	CRT
9. Conduct analysis of variance to determine gains in student achievement. Review achievement targets and ongoing programme development.	November Peter, Ilisa, Jo, Carolyn	Analysis of variance completed (see below). Achievement targets reviewed for 2008 and continuation in Numeracy Sustainability programme confirmed.	Release time

## End of year summary and analysis of variance

### *1&2 Identify lead teacher, allocate management unit and participate in numeracy sustainability programme.*

The decision was made to assign two staff as lead teacher in order to build leadership and numeracy capacity within the school. Additional release time was budgeted to enable both teachers to attend all training sessions and jointly plan staff development and support programmes. This worked very well, particularly because the lead teachers represented both junior and senior areas of the school. MU was assigned to one of these two teachers, the other being the DP. The numeracy sustainability programme worked well in school when it was able to be 'filtered' through the lead teachers. Constant updating and refining of numeracy tools can be confusing for teachers, especially the changes to assessment techniques. We benefited from lead teachers trialing new ideas first and then working with staff to adapt current practice.

### *3&4 Assess students and develop achievement targets*

All students were assessed in March using NUMPA and ICan assessments. Gaps were identified and used to plan individual class programmes. School-wide achievement targets were set for Year 3 and Year 5 students. We focused on Year 5 because this was a relatively weak cohort within the school (we had worked with the numeracy model for only 2 years so Year 4-6 students showed the greatest lag). We also chose Year 3 because this is a key transition point from junior to senior part of the school.

Student achievement targets were refined by early May to reflect national expectations of achievement levels. There was considerable discussion before we agreed to the final targets. We expected the targets would be too ambitious for some students but preferred to aim high and strive to do our best. We developed the 'plunket graph' (see below) as an attempt to track progress of each cohort against a band of expected achievement as defined in the numeracy project.

### *5&6 Conduct PD sessions, in-class observations and teacher support.*

The lead teachers conducted 8 staff development sessions through the year, including 2 extended sessions (2-7pm). All sessions involved whole staff and occasionally included support staff. Teacher observations were conducted on a 'needs basis' at the request of teachers. Our team teaching model facilitates ongoing observation and sharing of practice. Staff worked closely to conduct, mark and evaluate assessments. Lead teachers prepared a maths curriculum plan and introduced this in term four. Numeracy did not form the focus of a Quality Learning Circle (QLC) round during the year.

### *7 Conduct parent education.*

During maths week in August a very successful parent evening was held. Parents observed numeracy lessons in progress, students demonstrated numeracy techniques to parents and a lively discussion was held about the numeracy model. Parents were offered a range of strategies to use at home. Further information and links to useful websites were posted on the school website and in the newsletter. Other resources were sent home from time to time. A number of parents observed and participated in classroom numeracy programmes during the year.

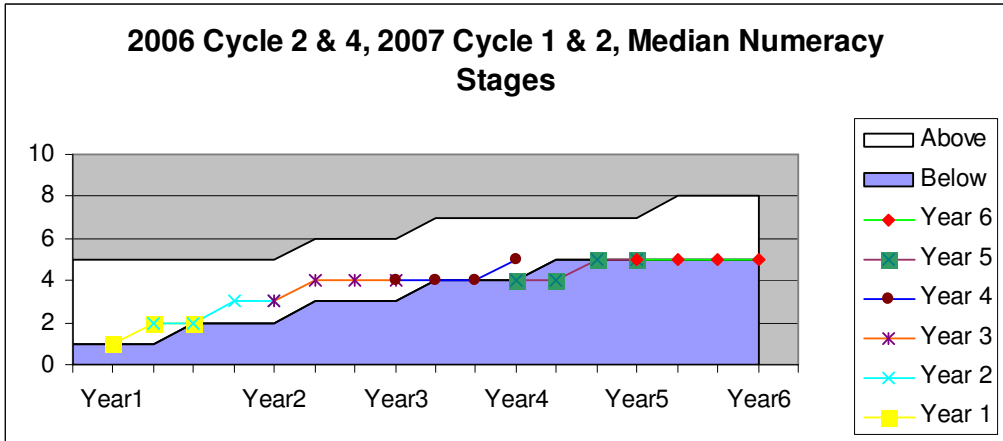
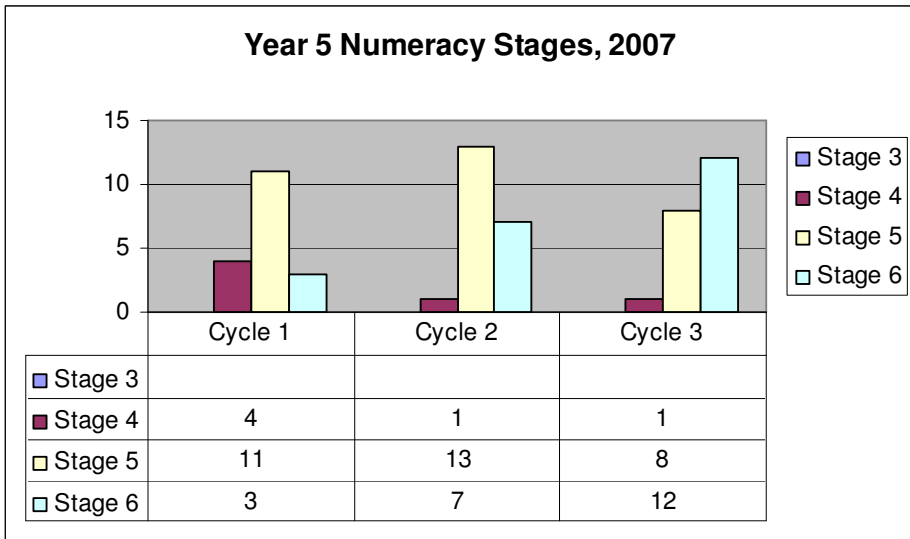
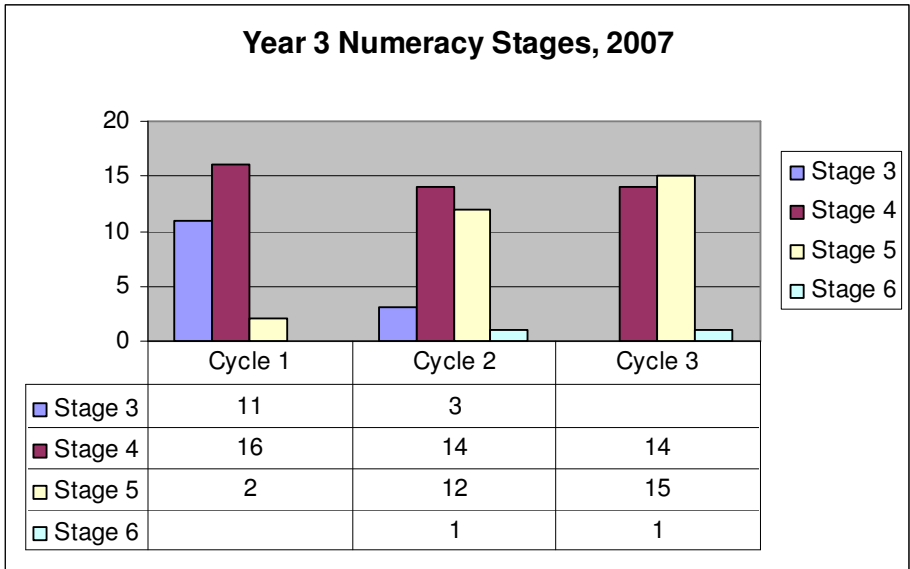
### *8 Conduct final assessments, evaluate progress and identify ongoing programme development.*

See below for results.

The graphs on the following page show progress in numeracy stages for Yr3 and Yr5 students in Addition/Subtraction. Our target was to have Yr3 students working at stage 5 and Yr5 students working at stage 6 by the end of Cycle 3. These targets were not achieved. However considerable progress was made by both year levels.

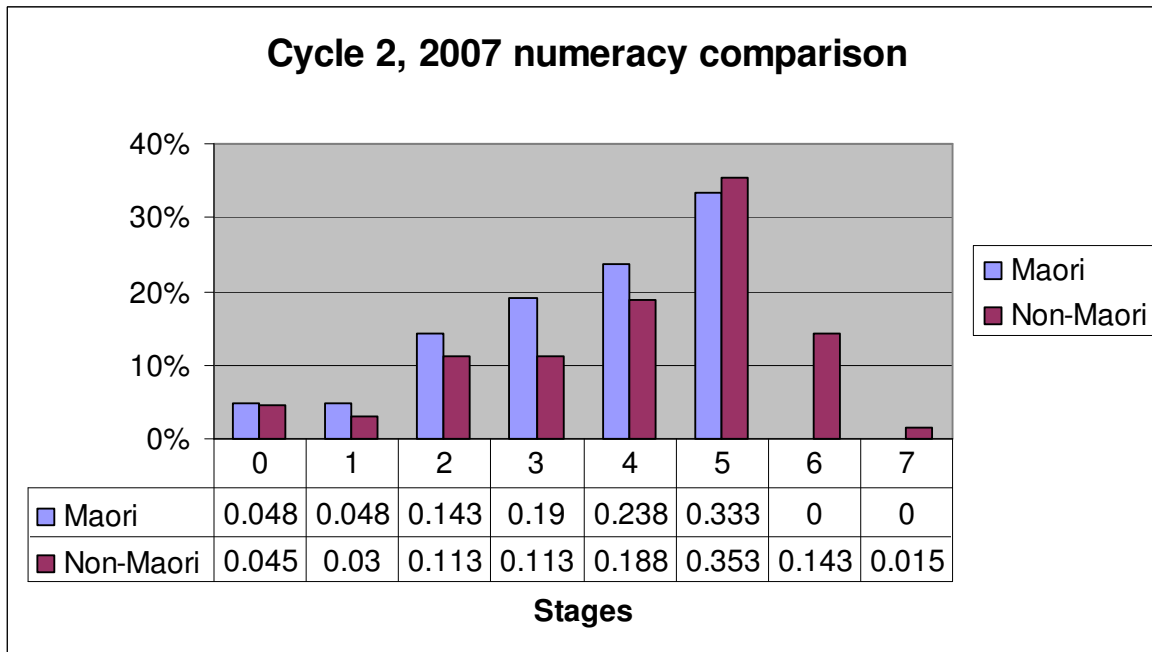
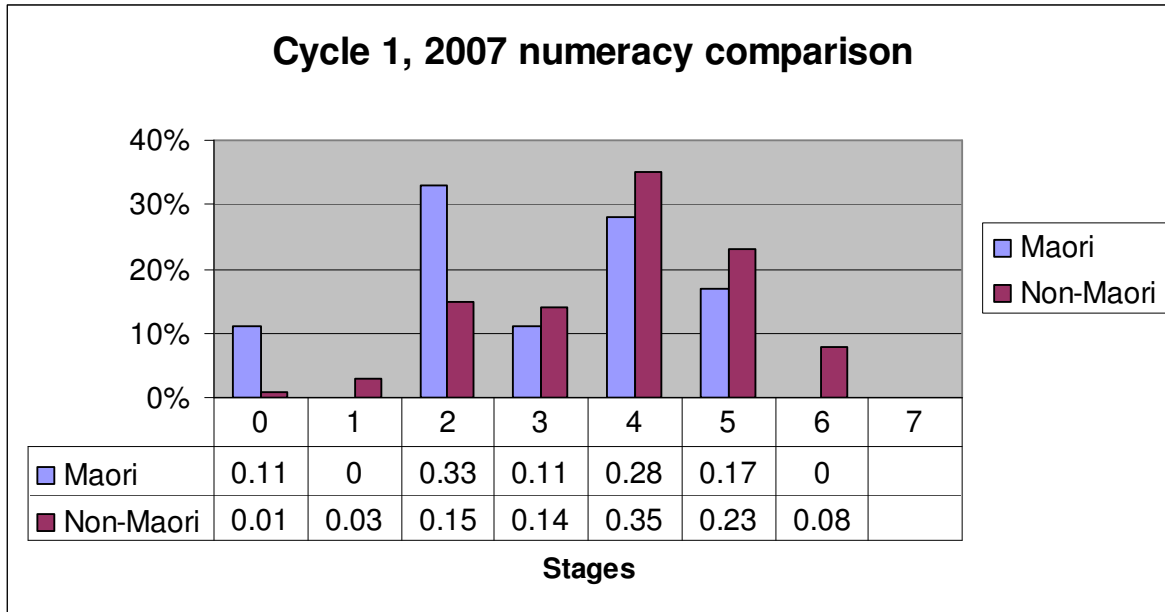
At Yr3 the numbers of children working at stage 5 increased from 2 in Cycle 1 to 15 in Cycle 3 – 50% of Yr3 students. By the end of Cycle 3 no Yr3 students were working at stage 3 but 14 – nearly half of the cohort – were still working at stage 4. This was partly due to a large number of children with low achievement levels and special learning needs at Yr3. Several of these children had received ongoing additional support through a teacher aide.

At Yr5, 12 children (60%) were achieving at stage 6 by the end of Cycle 3, compared to only 3 in Cycle 1. One child with severe learning needs continued at stage 4 throughout the year.



The 'plunket' graph above is an attempt to demonstrate longer term progress of each cohort within an achievement band identified through national data. The blue zone indicates children operating below the normal band. The white zone is the band of normal or expected achievement. The grey zone indicates above average achievement. The joined up line charts the progress of each Southbridge cohort across

four assessment points between Cycle 2, 2006 and Cycle 2, 2007. From this graph it is apparent that students in years 1-3 at Southbridge School are performing within the band of normal or expected achievement. Year 4 students have climbed into the white zone during 2007. Year 5-6 students continue to perform at the bottom of the white zone, although Year 5 students have shown improvement to reach this level.



The two graphs on this page compare Maori (N=22) and non-Maori (N= 125) achievement in numeracy between Cycle 1 (April 2007) and Cycle 2 (July 2007) for all students at Southbridge School. It is pleasing to see a large number of Maori students have moved from stage 2 to stages 3 and 4 during this period. To a degree the absence of Maori students at stages 6 and 7 reflects the relatively large number of Maori students at Years 2-4, although it was concerning that Maori students at most year levels were achieving at or below non-Maori students and also below national expectations.

## **Considerations for 2008**

The data above, and our experiences of numeracy professional development in 2007, point to some possible actions in 2008:

- Focus on low-achieving students. Boosting resources for low achievers should support learning for these students and lift achievement levels for each cohort.
- Identify needs of Maori students more closely. We could use our data to get a better picture of strengths and needs among Maori students and target interventions to lift their achievement.
- Focus on Yr 6 students. Our Yr 6 students in 2008 are the final cohort that has not worked with the numeracy model throughout their primary years, which may contribute to the relatively low achievement of this group over the past year or two. Some additional support for this group may be useful.
- Consolidate teacher practice across the school. Employment of several new staff, including staff who have not trained with the numeracy model, encourages us to remain on the Numeracy Sustainability programme in 2008 and to make achievement in numeracy a continuing focus.

**Peter Verstappen**  
**Principal**

