NAPLAN gains and Explicit Instruction

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Mountain View Adventist College (located in Doonside, NSW) has been receiving funding as part of the NSW Literacy and Numeracy Action Plan that is targeted at improving literacy and numeracy skills in early primary students since 2013.

At the beginning of the program specific research was shared with the staff that highlighted the importance of teaching literacy and numeracy well in the early years of schooling. Juel (1988) stated that the probability of 'at risk' readers remaining poor readers in later grades ranges from 50-90%' while Morgan (2009) goes on to say students with poor mathematic achievement in Kindergarten (lowest 10%) have a 70% chance of being in the lowest 10% five years later. According to OECD data (2013), the literacy level of 44% of adult Australians and the numeracy level of more than 50%, make everyday tasks very difficult. Mountain View Adventist College teachers decided to impact this deficit by accepting the challenge of improving their professional practice and students' learning.

> *"Successful instruction does not depend upon the attention, memory and motivation of the student. The attention, memory and motivation of the student depend on successful instruction"*

As part of the requirements to receive the funding the school had to develop a yearly Implementation Plan. This plan mainly focused on professionally developing the skills of the K-2 teachers. The school leadership then decided that the Years 3-6 teachers needed to be included in the training if there was to be a change across the whole school. The primary teaching staff at Mountain View Adventist College was consequently trained intensively for four years by consultants from the Association of Independent Schools and partnered university lecturers in Reading, Phonics, Writing, and Mathematics.

So what did we do differently?

Research from The National Research Council, the National Reading Panel, and the National Enquiry into the Teaching of Literacy and Numeracy all came to the same conclusions that the most successful way to teach a young student literacy and numeracy is through ***Explicit Instruction***.

> It is concrete and visible, the teacher explains new concepts and strategies in clear and concise language. It involves modeling and explaining concepts and skills using many examples. Teachers provide a high level of support as teachers practice and apply new learned concepts. (Vaughn Gross Center for Reading and Language Arts, 2005, p. 2)

The teachers from Mountain View Adventist College came to the understanding that "Successful instruction does not depend upon the attention, memory and motivation of the student. The attention, memory and motivation of the student depend on successful instruction" (Howell & Nolet, 2014). This understanding lead to the 'Morning Routine' happening in each Kindergarten to Year 6 classroom. During the Morning Routine the teachers would spend 30 minutes each day following a very intense, fast paced direct instruction program that follows the same format every day. Students, by the end of the first week, know exactly what to expect and are very motivated to work together at this time.

The students in Junior school sit on the floor facing the Smartboard (in Years 5 and 6 they sit at their desks). The teacher directs the whole session with the students not asking questions - no hands up - but all giving a choral response to what the teacher has said as prompted. The teacher will typically introduce new or repeated elements within the categories listed below:

- A sentence of the day – (grammar based)
- Talk for learning – (vocabulary building)
- Mental maths – (number)
- Time concepts – day/date/month/season/ weather
- Capital cities – (geography)
- Other pieces of information are added to the Morning Routine, all depending on the subjects taught at that time.

There is emphasis on learning intention – all students and teacher says "*we are learning to … .*" There is also emphasis on success criteria "*I will be successful if I can … .*" By reminding the students at all times what the expectations for learning are, they begin to see relevance in what they are learning and

become more engaged.

As I walk around each class I have watched every child and their engagment in their learning during the morning process. I honestly got goosebumps when I walked into one of the classrooms and the Morning Routine was in process. The teacher used the Smartboard, put a PowerPoint up that they had created and began a

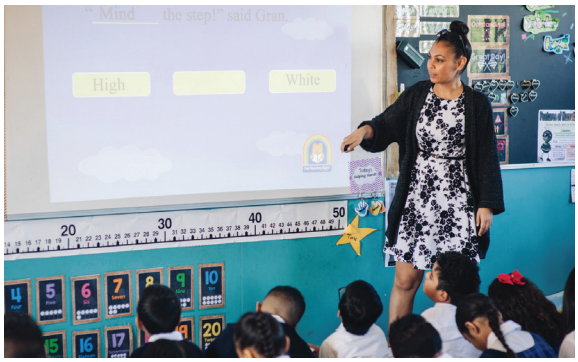

Figure 1. Ms Candace Dalton going through the Morning Routine with Year 1 Students "Mind the step!" said Gran.

routine they will repeat every day until the children 'get it'.

This morning they were talking about time. The teacher told them a fact, they all chanted the fact, then she told them to turn to the child beside them and repeat the fact to them. Watching Year 1 do this in such a natural way tells me that it wasn't "put on" because I was in the room. I walked around every Kindy - Year 6 (K-6) class and they were all engaged in some form of learning. In Year 6, the class talked about what success looked like. They all gave an opinion, then wrote on cardboard what they all came up with, as a consensus statement, "In Year 6 we will work to the best of our ability and we will not give up until we succeed." To watch these kids totally engaged was a beautiful thing.

Another change in practice, implemented at the beginning of each lesson, involved each teacher modelling and explaining what the learning expectations for the lesson will be initially a presentation by them (I DO). They then engage all the students in a discussion of the content that has just been taught (WE DO), and finally the students then follow through by engaging with the content in individual or group activities (YOU DO).

Results

What gains have we seen as possible outcomes of this systematic, across all K-6 classes, intervention?

In 2017, after the four years of training and implementing the different teaching strategies, the school received notification from the Australian

Figure 2. Explicit Teaching Model
Source: Rosenshine (2012). The Association of Independent schools of NSW

Table 1: Summary of NAPLAN Growth 2016

	NSW schools	AIS schools	MVAC
Growth From Year 3 to Year 5			
Reading	80	79	**114**
Spelling	78	77	**91**
Grammar/ punctuation	76	73	**94**
Numeracy	92	91	**96**
Growth From Year 5 to Year 7			
Reading	38	36	**40**
Spelling	44	**45**	44
Grammar/ punctuation	**32**	31	31
Numeracy	59	62	**73**
Growth From Year 7 to Year 9			
Reading	33	34	**41**
Spelling	34	37	**47**
Grammar/ punctuation	21	19	**28**
Numeracy	41	40	**61**

> *demonstrated substantially above average gain in over 70% of the cohort in their 2016 NAPLAN results, as students progressed from Year 3 to 5, 5 to 7 and 7 to 9.*

Development in both Literacy and Numeracy that the K-6 teachers have participated in … is now paying off with significant growth in student achievement.

Curriculum, Assessment and Reporting Authority (ACARA) that the College had demonstrated substantially above average gain in over 70% of the cohort in their 2016 NAPLAN results, as students progressed from Year 3 to 5, 5 to 7 and 7 to 9.

The College is understandably very pleased with these results and realise that the Professional Development in both Literacy and Numeracy that the K-6 teachers have participated in over the last four years, mainly funded through the NSW Literacy and Numeracy Action Plan, is now paying off with significant growth in student achievement. The teachers are also aware that it is through consistently good explicit teaching and effective student engagement with the content, that these results will continue to show significant growth in student achievement.

References

Howell, K., & Nolet, V. (2014). *Successful instruction does not depend upon the attention, memory and motivation of the student. The attention, memory and motivation of the student depend on successful instruction.* Retrieved: https://sydney.edu.au/education_social_work/professional_learning/resources/papers/slc-2014/Howell-keynote.pdf

Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology, 80*(4) 437-447.

Morgan P. L., Farkas G., & Wu, Q. (2009). Five-year growth trajectories of kindergarten children with learning difficulties in mathematics. *Journal of Learning Disabilities, 42*, 306–321.

OECD (2013), *OECD Skills outlook 2013: First results from the survey of adult skills*, p. 63, 75. OECD Publishing. Retrieved on June 30, 2017 from http://dx.doi.org/10.1787/9789264204256-en

Vaughn Gross Center for Reading and Language Arts. (2005). Delivering effective instruction. In *Leading for reading success: An introductory guide for Reading First Coaches* (pp.3, 1-3, 24). Austin, TX: University of Texas at Austin. Retrieved May 3, 2017 from https://www2.ed.gov/programs/readingfirst/support/coaches.pdf