

Good news stories

Cluster Story
Swan Cluster

Following is a group of snapshots from the Cluster's teachers, Aboriginal educators, education assistants and leaders.

1. Comments from the classroom

Moorditj teacher :

As a class teacher, I have completely changed my teaching style. Previously, I worked from a WA Maths text book and just worked through it. I understand the subject far more, use different language and as a consequence there is far more activity and hands-on work happening. Children are now choosing mathematical games and activities to do in their free time.

“As a class teacher, I have completely changed my teaching style.”

Moorditj teacher:

Children in pre-primary have a strong understanding of ‘friends of ten’ and several are filling in hundred charts showing an understanding of the patterns in columns and rows”.

Moorditj teacher:

Repetitive writing and counting on a daily basis has given Kindergarten children an understanding of number names and order at a far earlier stage than previously.

2. Swan View - education assistant working in GIRN's (Getting It Ready in Numeracy) class

We were doing partitioning activities building towers with unifix cubes to show different partitioning of small numbers. Each coloured cube had a different value e.g. white =1, blue =2, green =3. The students were asked to build a tower worth the value of 6 and they had to record their partitions. A group of five or six students working with the EA did not grasp the different values associated with the blocks, and Donna thought to draw dots on the blocks to show their worth. The students then completed the task successfully. This showed initiative, knowledge about matching quantities and numerals and how important it is. It also showed confidence in her belief to assist the children with their mathematical understanding in a positive manner.

3. Swan View - Teacher

- Showed that there is a sequence to maths learning.
- The way to engage children is through games – this works!
- The importance of the language of mathematics.
- Maths is fun! I've grown as a teacher.
- Indigenous kids build on success through numeracy games.

4. Swan View - teacher

This year was rather interesting. My own conceptual ideas of mathematics teaching were challenged and extended, as were the students'. The Indigenous students struggled initially with the ‘new way’ of mathematical thinking. A lot are used to providing an answer to satisfy the teacher. This I found to be a result of their previous maths learning. This included a lot of worksheet based learning. As they grappled

with the new (most are used to vertical algorithms) I found their confidence needed to be scaffolded in addition to maths knowledge and their concept of maths being solely to provide the teacher with the correct answer. This is a power relationship that does need to be addressed in the future."

5. Swan View - Aboriginal educator

I have found working with the Make it Count program very enjoyable. Following the learning sequence has made a big difference to how I look at maths. Having the program full of hands-on activities has made a huge difference with my small group of year six students.

At the start of this program my students were very unsure of themselves. They never trusted the count and would always re-count. One student in particular was always unsure and very doubtful in everything she did. If you asked her a question she would freeze or even cry in fear of making a mistake in front of peers. Now she is happy working on equivalence or variance. Where in the past she would offer only one solution to the question, she is now giving six or seven different combinations and is not upset by any mistakes.

"It is apparent that teachers and support staff are valuing a culture of learning with a focus on our Aboriginal students."

6. Swan View Principal – Cluster Key School

I have been amazed at the rate of professional learning. Clear, explicit curriculum discussion is engaged in by teachers and education assistants because there has been a focus on the acquisition of both theoretical and working knowledge. Staff members have been far more targeted within the teaching, learning and assessment cycle. It is apparent that teachers and support staff are valuing a culture of learning with a focus on our Aboriginal students.

7. Professional Learning feedback

- Place value connection begins in K and PP as skip counting/partitioning needs to be understood. These basics are to precede place value.
- I learnt the importance of the steps of mathematics. Counting, subitising, skip counting, place value, partitioning. You can't teach place value without the student having these key understandings.
- Hands on activities are important to Aboriginal students. They must see the whole number so that they can count. By using a variety of manipulatives to show how to do place value / subitising, we use different things so kids don't get complacent with ideas.

8. V Swans program

Differences noted in the children involved are:

- Children's behaviour is better.
- Attendance for all children, but in particular Indigenous children, has improved.
- Respect for others seen during this program.
- Children are keen to try new things and are more willing to have-a-go at the mathematics associated with V Swans.
- Many comments by Year 7 Aboriginal and non- Aboriginal students at the Graduation, that it has been one of the best and most challenging programs they've been involved with in their primary years.

9. Maths Mob - Indigenous student Yr. 2

2 x lunchtimes/week high interest targeting Aboriginal students.

- "You get to play on the iPads. You get to cook other food. You can play with the play-dough"
- Q: What do you think Maths Mob means?

A: "Having fun, doing maths."

- Q: What sort of maths do you do in Maths Mob?

A: "Those things where you put butter in to show you how much you need. They're scales, they weigh how much things you got"

- "I try to make numbers with the play-dough, like number two. I would like to make a twelve in numbers."
- iPad- "There's a monkey game where if you get the number sentence right the monkey gets his food."

- Q: How is Maths Mob different to maths in your classroom?

A: You get to do cooking in the Maths Mob instead of normal writing in the classroom."

- Q: Do you think coming to Maths Mob has helped you with your own maths?

A: A little. It's nice. Ipads help with a plus or a times in the number sentence thing.

- Q: How do you feel when Maths Mob isn't on?

A: Not so cool. Because Maths Mob makes you cooler and you do cool things at Maths Mob.



Finding 2.1: Content

Know that teachers and education officers must continually improve their mathematical content knowledge.



Finding 3.7: Kinaesthetic

Use kinaesthetic pedagogical practices as a point of entry to abstract mathematics knowledge.