

Creative ways to invest in the early years as the launch pad for building high impact rural learning communities

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The Let's Count program

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Maths matters – how is Australia doing?



- Essential for everyday living
- Critical for employment
- STEM drives innovation and economic growth
- 1 in 4 children in Australia's most disadvantaged communities are behind in first year of school – similar figures for some regional/rural VIC communities
- NAPLAN
- Adults 12th out of 22 OECD nations



Developing children's early maths skills



- Childhood maths skills predicts later achievement
- Parents and home learning environment critical
- Many parents are uncertain or negative
- Maths in the 'everyday'
- Interesting, useful and fun, positive disposition



Let's Count early maths program

Designed by Professors Bob Perry, Ann Gervasoni and The Smith Family to improve maths skills of children 3 to 5



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Workshops for early years educators to enhance their skills and confidence to develop maths learning of children in their care and support parents to promote children's maths learning.





Educators work with parents/carers; give guidance on using everyday activities to notice, explore and talk about maths concepts with their children



Parents use the ideas and resource packs to explore maths with their children

Young children engaged in foundational maths in home environment, develop stronger skills and positive attitude to maths

Let's Count - Developing children's early maths skills



- 17 communities across all states
 - including Ballarat, Shepparton
- 8,500 children
- 4,500 parents
- 300 educators
- 3 year evaluation to assess impact on children, parents, educators
- Assess children's mathematical growth and compare with similar children not involved



Children's results



Task	March 2013 4 year old %	Dec 2013 5 year old %	Dec 2012 5 year old %
	SAME GROUP OF CHILDREN WHO PARTICIPATED IN LET'S COUNT		SIMILAR CHILDREN WHO DIDN'T PARTICIPATE
Rote count to 20	17	54	37
Order 3 one-digit numbers	4	66	47
Order 4 candles shortest to longest	23	68	54
Make collection of 7 when shown number	59	84	63
Knows some triangles	81	94	83
Divides 12 teddies between 4 mats	1	61	31
Continues pattern	16	48	34

Educators' results



Proportion and frequency of parents talking with educators about maths

Proportion of parents	Survey 1 %	Survey 2 %
All	0	6
Most	7	12
Some	58	76
None	35	6

Proportion of parents	Survey 1 %	Survey 2 %
Daily	0	0
Weekly	0	24
Occasionally	65	67
Never	35	9

Key themes from educators



- Helped engage families with maths learning
- Supported continuity of learning between early childhood setting and home
- Positively impacted on educators' confidence and teaching practice
- Noticed children's engagement and advances in maths learning



Educators' comments



"It's been positive for building relationships with parents because they've felt that we're acknowledging them as their child's educator..."

"Whatever we're involved in, even with the gardening outside...we're attempting to incorporate maths throughout."

"The child that's really taken to the graphs is one I would not have expected..."

"I wish everybody had the opportunity to do Let's Count, because I've just seen such a big improvement in the children's concepts of maths and preparing them for school next year...they're going to be so much more comfortable in a new setting and really participate to their fullest."

Key themes from parents



- Parents able to notice maths in everyday interaction with children
- Children's growing confidence, knowledge, enjoyment with maths
- Positive impact within families older and younger children
- Increased communication about maths between parents and educators



Parents' comments



"Having that program has boosted my confidence enough to say ok, she's catching on to this very quickly, she's talking about it at home, in general conversation...maybe she's going to be ok to go to school."

"It was a nice reminder how simple things can be at home and immediate in your environment."

"...it's definitely made me more aware of using the more technical terms with her..."

"I think it's fabulous, that's exactly how I think kids should learn most things, particularly when it can start at home from such a young age and not just at school in a formal setting. Sometimes you don't realise as a parent that you're actually doing it quite often, much more than you think.... it is a holistic approach rather than just 'Let's count to 10'."

Evaluation summary



- Positive impact on children, parents and educators
- Strong growth in children's maths knowledge and skills
- Stronger skills than children who didn't participate
- Positive maths attitudes and dispositions
- Parents and educators increased skills and confidence to support maths development of children





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