Sunshine College
Creating futures



GROWTH

LEARNING

RELATIONSHIPS

WELLBEING

Maths Futures

Sunshine College Maths Program

North Campus
Northumberland Road, Sunshine North
(03) 8311 8500

West Campus
25A Lachlan Road, Sunshine West
(03) 8311 5200

MATHS FUTURES PROGRAM

Sunshine College launched its award-winning numeracy program in 2009 with the vision of engaging all students in positive and meaningful mathematics learning experiences. The goal was to ensure every student could access mathematics that was “just right” for their individual learning needs. This vision was brought to life by a dedicated and experienced team of teachers who collaborated to develop an extensive bank of differentiated resources tailored to meet this goal.

Since its inception, the program has continued to evolve. The teaching team remains committed to regularly reviewing, refining, and expanding these resources to ensure that all students from Years 7 to 10 engage with high-quality learning tasks that offer the right level of challenge and support with a strong focus on collaborative learning, conceptually rich lessons, and targeted learning.

Our mathematics program integrates four key curriculum strategies: Reciprocal Teaching, Differentiated Lessons, Scaffolding Numeracy Across the Middle Years (SNMY), and Digital Maths. Developed through collaborative action research, the program is grounded in a philosophy that values growth mindsets and uses data-driven practice to build a culture of educational excellence. Through this approach, we ensure that all students are supported and empowered to strive toward success.

The 4 Key Curricular Elements

Differentiated Content
Reciprocal Teaching
Scaffolding Numeracy in the Middle Years
Digital Maths

Each element is designed to address .....



Our Innovative Program

'The high quality Maths Futures program at Sunshine College blends four key curricula strategies (Reciprocal Teaching, Differentiated lessons, Scaffolding Numeracy in the Middle Years and Coding) and two philosophies (Growth Mindset and Data Driven) which together drive our culture of educational excellence. Our program ensures all students strive towards success.

These high-impact strategies were developed through collaborative action research and derived from evidence based best practices.



Award Winning

Sunshine College established its award winning mathematics program in 2009, with the aim to include all students in a positive learning experience in mathematics which allowed them to learn the mathematics which was "just right" for them.

This was achieved by a team of dedicated, experienced teachers collaborating to create the huge bank of differentiated resources required to meet this aspirational aim.

In the years since the program was established, the teaching team have continued to develop, review and refine these resources to the point where every lesson for every student in years 7, 8, 9 and 10 now comprises of high quality learning tasks which provide the appropriate level of challenge for every learner.

The innovative resources require an innovative approach in their delivery and teachers work in teams to deliver every lesson and maximise opportunities for authentic learning in every class.


SUNSHINE

Maths program add

SCHOOL'S INNOVATIVE SKILLS BOOSTING PROGRA

DIFFERENTIATED CONTENT

2 lessons per week

Differentiated Mathematics Instruction: Engaging Every Learner

At Sunshine College, two Mathematics lessons per week are dedicated to a differentiated curriculum designed to meet the diverse learning needs of our students.

Each session begins with a warm-up activity, followed by a brief teacher-led introduction. Students then engage in hands-on, collaborative tasks that encourage exploration, critical thinking, and self-directed learning. This structure allows teachers to provide targeted, explicit instruction at the point of need while fostering independence and confidence in students.

Our approach aligns with Vygotsky's Zone of Proximal Development (ZPD), ensuring that students work at an appropriate challenge level without rigid streaming or grouping. By creating a culture where students take ownership of their learning and progress is valued over absolute scores, we empower every student to achieve success in mathematics.

RECIPROCAL TEACHING

1 lesson per week

Reciprocal Teaching: Strengthening Mathematical Literacy

At Sunshine College, students engage in Reciprocal Teaching for Mathematics for one period per week. This research-based strategy, adapted from the model proposed by Palinscar and Brown (1984) and further refined by Reilly, Parsons, and Bortolot (2009), is designed to improve mathematical literacy by developing students' ability to interpret and solve complex problems.

Working in small, cognitively aligned groups, students select tasks from one of six levels and collaborate to solve them. The questions are not aligned to any specific topic or unit of work, ensuring students receive ongoing exposure to multiple mathematical strands. Each problem interweaves different strands, reflecting the real-world application of mathematical knowledge.

Through rich discussions, students justify their thinking, trial their peers' ideas, and refine their strategies collaboratively. This structured yet dynamic learning environment fosters critical thinking, problem-solving skills, and mathematical confidence, empowering students to tackle complex challenges with clarity and precision.

SCAFFOLDING NUMERACY IN THE MIDDLE YEARS

1 lesson per week

Scaffolding Numeracy: Building Strong Foundations in Mathematics

At Sunshine College, one lesson per week is dedicated to strengthening students' mathematical understanding through the Scaffolding Numeracy in the Middle Years (SNMY) program, developed by Professor Di Siemon and her team at RMIT University. This research-based approach focuses on key mathematical concepts, moving students from additive thinking to more advanced multiplicative strategies and proportional reasoning.

While originally designed for Years 5 and 6, SNMY is highly effective for secondary students who need targeted support to build essential numeracy (additive and multiplicative) skills. Many students enter secondary school with gaps in their understanding of fundamental concepts, and this program provides structured, engaging activities to help them progress confidently. By explicitly addressing misconceptions and developing deeper mathematical reasoning, SNMY empowers students to become more capable, flexible problem-solvers, setting them up for success in higher-level mathematics and real-world applications.

DIGITAL MATHS

1 lesson per fortnight

At Sunshine College, one lesson per week is dedicated to integrating mathematical curriculum with digital technologies. Here, students partake in activities that focus on computational and algorithmic thinking, utilising various digital platforms for programming and mathematical investigations, and problem-solving within a mathemtical context.

With the increasing digital age, we recognise the need to prepare students with the skills required to navigate and thrive in a technology-driven world. By embedding digital technologies into the mathematics curriculum, students not only deepen their understanding of mathematical concepts but also develop critical 21st-century skills such as logical reasoning, creativity, programming, collaboration, and digital literacy within the mathematical curriculum. This integrated approach ensures students are equipped to apply mathematical thinking beyond the classroom, fostering adaptability and confidence in solving real-world problems through innovative digital tools and platforms.

GROWTH MINDSET

At Sunshine College every teacher strives to create an environment where students believe they can improve. This is achieved by ensuring we value progress and personal development irrespective of where the starting level might be. This is an environment where students are supported to identify and select the activity which is "just right" for their learning requirements, so it is necessary to help students to understand what learning feels like for them.

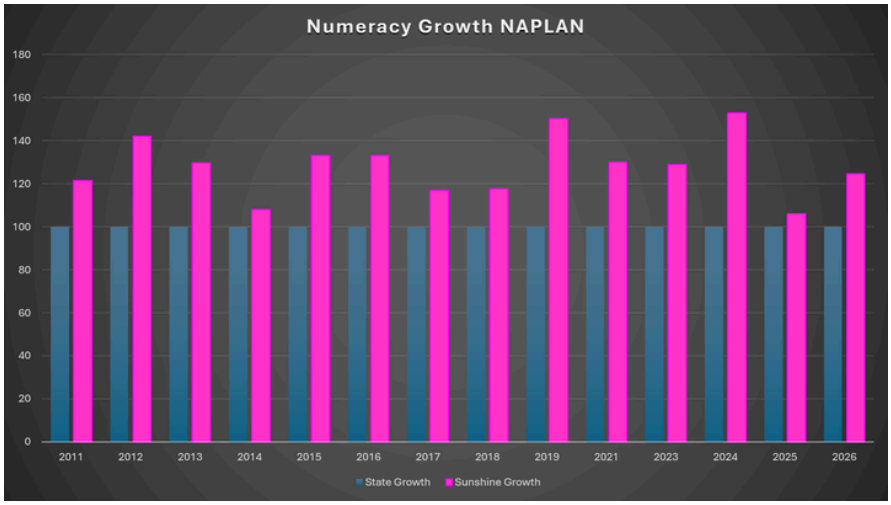
For this to work, the teaching team must ensure that tasks are prepared to satisfy these multiple needs. Students are not expected to help "less knowledgeable" others unless that help is completely reciprocated. This means that students are encouraged to work with other students who think at the same speed as they think themselves.

DATA DRIVEN

It is of the highest importance that we collect data on every aspect of our program to evaluate effectiveness and hold ourselves to account.

NAPLAN matched cohort data shows that students who commence at Sunshine College in Year 7 and sit NAPLAN Numeracy again in Year 9 make strong progress during their time at the College. When comparing the mean Numeracy scores of this same cohort from Year 7 to Year 9, our students demonstrate greater growth than the average student across Victoria. This pattern has been consistent over a number of years, as shown in the table below.

We report to parents on growth of their child between the years of 7-10 and every student has access to digital platforms to track their own personal growth in mathematics as determined by PAT testing.



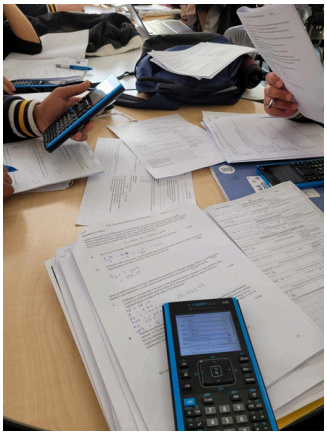
THE RESULTS

Supporting Other Teachers

The Sunshine College Maths Futures Program has not only transformed student achievement within the school but has also influenced mathematics education at a system-wide level. Recognised for its innovative approach, the program has attracted national and international attention, with over 60 schools visiting Sunshine College to observe its success in action.

Beyond the school, the program's impact extends across the education system through its alignment with key Department of Education numeracy initiatives, including the Premier's Maths Challenge and the Literacy and Numeracy Strategy Phase 2. These initiatives, in which Sunshine College has played a pivotal role, have contributed to improving numeracy outcomes across the state, fostering excellence in Teaching and Learning.

The program's data-informed approach has significantly enhanced student outcomes and serves as a model of best practice. Its success demonstrates the power of curriculum innovation in driving meaningful educational change at both school and system levels.

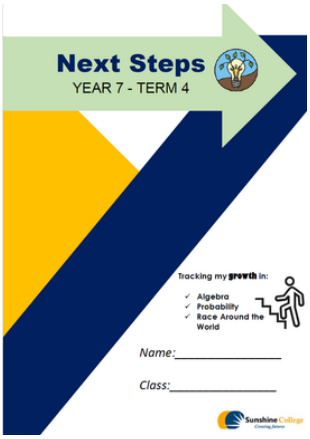


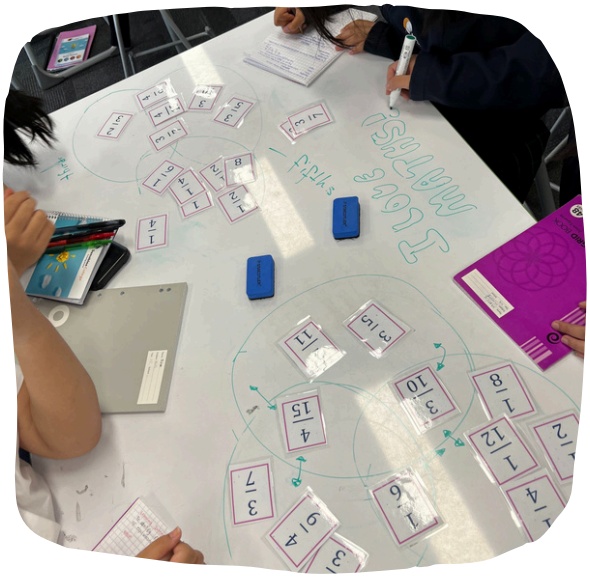
VCE

Our differentiated curriculum caters for students of diverse learning levels to succeed in their learning including leading into opportunities for early entry into VCE Mathematics.

Next Steps

Our Next Steps assessments are purposefully designed to help students set individual learning goals and monitor their progress throughout each unit of work.





Reilly, Y., Parsons, J (2014), Effective Differentiation; where a growth mindset meets the ZPD. Maths Rocks. MAV Conference Proceedings 51 st, pp128-135

IN THE NEWS



STAR WEEKLY
BRIMBANK & NORTHWEST
NOVEMBER 10TH 2015

Teachers Mary Kyris, Sharon Allan, Yvonne Reilly, Thao Huynh, Theo Gialamatzis and Jodie Parsons with students.

Sun shines on number crunchers

Sunshine College is the toast of the mathematics world, taking home two big accolades from the Victorian Education Excellence Awards on October 30. The college's internationally renowned maths program – the brainchild of Yvonne Reilly and Jodie Parsons – was acknowledged with the Lindsay Thompson award for excellence in education and the outstanding school advancement award. "We were genuinely thrilled," Ms Reilly said. Some of the prize money is earmarked to set up a state-of-the-art learning centre. "This will allow us to video link our classes and support schools all over Australia to deliver maths classes better," Ms Reilly said. Students at the college celebrated the win with chocolate frogs.

Ian Thomas Ackerman



TOP OF THE CLASS

Numbers add up for bold approach

Yvonne Reilly has developed a new approach to teaching maths.



Maths barriers toppled

Two Sunshine College teachers are gaining worldwide recognition for transforming the way they teach maths.

The technique forged by Jodie Parsons and Yvonne Reilly has proved so popular that this year the pair will travel to Scotland to present at an IMA international conference on "barriers and enablers to learning maths".

They have also been invited to share their experiences at a TEDx education event in Bendigo this month.

Ms Parsons, the school's head of curriculum, said the pair first investigated best practices in maths before coming up with their own curriculum for year 7 to 10 students, one that better prepares them for VCE.

Ms Reilly, the college's head of maths, and Ms Parsons have co-authored several papers and presented at conferences around Australia and overseas.

"We were experiencing poor to average results [in maths] and wanted to make a real difference," Ms Parsons said.

"We worked hard but felt our hard work wasn't being as effective as it could have been, so Yvonne and I combined our classrooms and set about supporting one another.

"One of the most radical things we did was to ditch the textbook. Instead, each and every one of our differentiated lessons is designed by a team of highly qualified maths specialist teachers.

"This ensures that maths at Sunshine College accelerates all students, truly challenging the very best mathematicians."

Ms Parsons said that, on average, students who had been part of the program from years 7 to 9 had shown faster improvement rates during NAPLAN testing than the average student in the state.

Charlene Macaulay

Yvonne Reilly and Jodie Parsons are changing the way maths is taught.





HERALDSUN.COM.AU SATURDAY, DECEMBER 15, 2018

NEWS 05

Teachers go the extra mile, and it shows in ATAR average

A CLASS ACT

Sunshine College pupils show their joy and relief at finally getting their ATARs, and at how the school has seen a dramatic rise in its students' average rank. Picture: DAVID CAIRD

2018 VCE TOP SCORERS

TUESDAY IN YOUR HERALD SUN

- 2018 VCE TOP SCORERS
- 32-PAGE SOUVENIR LIFTOUT
- 20,000+ NAMES

TEACHERS who tutored struggling students at weekends have helped one school lift its VCE results by almost 25 per cent in just three years.

More than 47,000 Victorian students received their Australian Tertiary Admission Rank yesterday.

At Sunshine College, teachers and students celebrated a rise of 12 points in its average ATAR since 2015. The school in Melbourne's west has gone from 51.46 in 2015 to 63.12.

"You don't get that just by focusing on the academics," senior campus principal Mona Raghdo said. "We're really proud of all our kids."

Student Sophia Collantes wasn't expecting her rank of 88.2. "I actually cried.

ASHLEY ARGOON
EDUCATION REPORTER

"I recorded my reaction on my laptop. I've watched it five times," the 18-year-old said.

"There were definitely some teachers who went above and beyond doing what they needed to do.

"I had one teacher who would know when I was upset or needed to take a break ... for me, that was beyond his job. I don't think I could have got what I did without that help."

Rejjay Liong thanked his teacher who helped him with his arts folio on weekends.

"I thought they just do it because it's their job, but they really went out of their way to help me," said the 18-year-old, who achieved an ATAR of 82.7.

Sunshine College wasn't the only school that lifted its results remarkably.

Swinburne Senior Secondary, an alternative government campus for year 11 and 12 students, bolstered its average ATAR by two points in a year, from 27 to 29.

"We've got guys who were even at risk of completing VCE, then they've got their scores up into the 90s," principal Michael O'Brien said.

The high scores were one thing — the number of students with a study score over 40 went from six last year to 30, while other subjects recorded their best result in 10 years. Then there were the students who finished VCE, despite serious challenges. "Many who come here haven't had a great experience with schooling, maybe they're experiencing physical or mental health issues," Mr O'Brien said. "They needed to fall in love with learning again and I think we do that here."

Victorian students earned an average ATAR of 65.22 — 66.29 for females and 63.96 for males. Of the 36 that achieved a perfect 99.95, 24 were male.

Private school students secured the most top scores, with boys' school Scotch College leading the state with six perfect results.

ashley.argoon@news.com.au

VCE FORECASTERS, PAGE 34
EDITORIAL, PAGE 66



NEWS 11

Results add up for maths with a difference

On the web

GRATTAN Institute

MEDIA RELEASE
22 February 2014

Turning around troubled schools: it can be done

Some of Australia's most troubled schools are turning around their performance to achieve remarkable results and serve as a model for low-performing schools across the country, a new Grattan Institute report has found.

Turning around schools: it can be done examines two secondary and two primary schools to show that all of them have succeeded by following the same five steps.

They are: strong leadership that raises expectations, effective teaching with teachers learning from each other, development and measurement of student learning, a positive school culture, and engagement of parents and the local community.

"People think turning around a school only happens with superhuman leaders and teachers ... it doesn't," says Grattan Institute School Education Program Director Ben Jensen.

Governments and schools must develop the skills for change in the five steps for school turnaround, and then reinforce them with comprehensive evaluation and accountability mechanisms.

But Dr Jensen said these mechanisms had to focus on achieving change in the five steps, not just on test scores.

"If school turnaround is done well, it will make huge dent in inequality and enrich the lives of the students who need it most," he said.

The four schools examined in the report are Ellenbrook Primary School in Perth, Ravenswood Heights Primary School in Launceston, Holroyd High School in Sydney and Sunshine College in Melbourne.

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'Turning around schools: it can be done' examines two secondary and two primary schools to show that all of them have succeeded...'

THE AUSTRALIAN



Against the odds, schools provide lessons in excellence

JUSTINE FERRARI, PIA AKERMAN AND MATT DENHOLM
The Australian February 22, 2014 12:00AM

Sunshine Secondary's Tim Blunt with, from left, Lucia Tran, Selena Wang and Ryan Meyers. *Source:* News Corp Australia

TEACHERS will tell you every school is different, every child is different and there's no one-size-fits-all solution to improve schools. Strategies and techniques need to be adapted to fit the individual.

Yet there are lessons to be derived from experience, as set out by the Grattan Institute in its report on turning around school performance. The report sets out a five-step plan to improve the schools lingering at the bottom, and lift results, aspirations and opportunities for our weakest and most vulnerable children.

That's the easy bit. As report author Ben Jensen, director of the school education program at Grattan, says, turning around schools is hard. Relatively few schools lift their performance in a sustained and significant way "because it's one thing to know what to do but a very different thing to make it happen".

"The difficult thing is to trigger the change," Jensen says.

"This is very tough and where government comes unstuck. It's very hard for government in any area to change what people do on a day-to-day basis but that is what turnaround policies must achieve."

The four schools highlighted in the report serve different communities and face varying challenges from their array of students but they all demonstrate change is possible.

A belief in the possibility of change is the necessary first element coupled with an unwillingness to accept low performance. All schools in varying degrees have followed the same five steps:

Strong leadership that raises expectations, considered the vital ingredient that leads to a change in behaviour among students and teachers;

Effective teaching, using methods to significantly improve learning with teachers working together in teams or by learning from each other;

Measurement of student progress using test results to identify the gaps in students' knowledge where teaching should be directed, and to chart improvement to build on success;

A positive school culture providing an orderly and disciplined environment with new norms of behaviour for students;

Engaging parents and the community to reinforce behavioural norms and help lift student aspirations.

The good news is the number of schools where students are lagging more than two years behind the average for their grade is relatively small, about 6 per cent of the nation's total. It's a small enough number that a concerted effort from government and within the schools themselves can bring about the sort of change that will transform the lives of their students.

The best lesson in excellence comes from the schools themselves. Inquirer visited Holroyd High School in western Sydney, Ravenswood [illegible]

[illegible] literacy.

"Until it was pushed in our face, we didn't realise how big the problem was, and that's when we said we have to do something," he says.

Those crushing results as Blunt took the helm in 2006 triggered a multi-faceted whole-school approach to literacy and numeracy, controversial measures such as voluntary homework and scrapping textbooks, as well as steps to increase students' engagement and pride at Sunshine Secondary College, in Melbourne's industrial western suburbs.

Today, the school boasts VCE results well above similar schools, with nearly half the graduates going on to university and many others to TAFE or vocational study.

It began with a new intensive approach to literacy, known as the SunLit program, that saw teachers from all disciplines pulled in to devote extra periods to literacy for all students, who were divided into four different streams.

"Four days a week, period 2, everybody is in literacy in Year 7 to 11," Blunt says. "It costs me a fair bit of money to resource and get the staffing that we need into that program to get the outcomes we're getting."

The results have been strong, with numeracy next to receive a special focus as teachers devote extra hours to designing their own program rather than relying on textbooks.

For students in Years 7, 8 and 9, homework is voluntary in the belief that it is better for kids who are struggling to be helped by the teachers at school instead of parents who may struggle themselves with certain skills.

About one-third of students voluntarily take homework from a classroom out-tray without prompting, before homework becomes compulsory in Year 10.

Nearly half the students come from a family where English is not the main language, and [illegible]

self-esteem not only of kids but of the staff," Blunt says.

"As a school, I think we made a mistake a number of years ago because we thought that because our community was poor, we wouldn't have the aspirations for them that we should have. That was typified in the uniform we had."

Chosen by the Grattan Institute as one of five examples of how a school can turn around its academic performance, Sunshine Secondary College has been visited by educators from Victoria and other states looking to replicate its success.

Blunt says dedication, enthusiasm and leadership among the staff was crucial, as well as the resources to make the switch.

"It's hard because you have got to have the finances to do it and that's why it gets a bit daunting," he says. "You really can't do those sorts of things effectively without the extra funds."

'It began with a new intensive approach to literacy, known as the SunLit program...'



SUNSHINE

Maths program add

SCHOOL'S INNOVATIVE SKILLS BOOSTING PROGRI

Angus Livingston

THESATURDAYAGE

Sunshine a model in school turnaround



Uniform approach: Principal Tim Blunt with students (from left) Lucia Tran, Michael Douglas, Damon Humpleby and Katharine Nikolic. *Photo: Pat Scala*

Date February 22, 2014
BY KONRAD MARSHALL
EDUCATION REPORTER

There is no one-size-fits-all approach for changing the face of poorly performing schools, but new research suggests there are key traits that educators can strive towards.

Take the socio-economica[illegible] disadvantaged Sunshi[illegible] Secondary College, w[illegible] was highlighted as a [illegible] study in a Grattan I[illegible] report released on [illegible] titled *Turning [illegible] Schools: It Can be Done*.

When principal Tim Blu[illegible] took over at Sunshine in 2006, about two-thirds of the students in years 7 to 11 were barely achieving primary school levels of literacy. The school was in crisis.

"We knew we had a problem," Mr Blunt said. "But it wasn't until we looked at the data that we realised the depth of the problem – that it was an epidemic."

Confronting the issue began in 2007 with a "whole-school approach" that started with the simple allotment of extra class periods for literacy, even at the expense of other subjects.

"Team teaching" methods were also established, so that educators could judge and learn from one another, particularly in numeracy. There was a raft of nuts-and-bolts changes and even skin-deep tweaks, such as new school blazers, which had a profound impact on the culture of the school.

"There was a time when the kids said, 'We don't feel like [illegible] ingredient, as is teaching that emphasises collaboration and feedback. Measurement and data-driven analysis is a must, as is the creation of a positive school culture, and the involvement of parents [illegible] Sunshine has gone from the bottom 10 per cent to the top 10 per cent.

In 2011, the school was equal to or better than the handful of nearby independent schools, with a mean VCE study score of 29, just shy of the state average.

"When those results came out, I had teachers in tears," Mr Blunt said. "It was fantastic."

Director of the school education program at the Grattan Institute Ben Jensen said Sunshine was a perfect prism through which to view "school turnaround" – a transformative process that follows five key steps. Strong leadership that raises expectations is widely considered the vital [illegible] classified low-performing schools as those where students (on average) lag two years behind in both literacy and numeracy, based on NAPLAN data. By that stark measure, there is some good news for Victoria. Of the 156 schools identified nationally as low-performing, only seven were in Victoria. NSW had 43, while Queensland had 44 and Western Australia 28.

Mr Blunt acknowledged that little of what has happened at Sunshine could have been achieved without National Partnerships funding, which has allowed him to invest more than $500,000 in literacy and numeracy programs.

Dr Jensen, too, noted that government can play a productive role in triggering the right changes.

Education Minister Martin Dixon said the new state School Performance [illegible] focuses [illegible] and peer [illegible] schools [illegible] and [illegible] that [illegible] raised [illegible] he [illegible] need [illegible] help they [illegible] times."

Mr Blunt added: "You've just got to be prepared to identify the challenges . . . and then come together as a group – staff, community and kids. Then things really can change."

Read more:
http://www.theage.com.au/national/education/sunshine-a-model-in-school-turnaround-20140221-33844.html#ixzz2uHS1LtE

...when compared with schools facing similar disadvantage, Sunshine has gone from the bottom 10 per cent to the top 10 per cent.'



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