Peninsula Community of Schools





Term 4, 2016

Pittwater High School - Cochlear Australia and Macquarie University Visit

On Monday 17th October, 20 year 10 Maths students visited Cochlear Australia and Macquarie University. The excursion was to show real life applications of maths and science outside of school classes. Students met with engineers and university students who are studying degrees in medical science and actuary.

Cochlear Australia specialises in Cochlear Implants. These implants are supplied to people globally and improve the hearing of many different people with hearing loss. The students were given a tour of the largest clean room in the southern hemisphere where the implants are made and tested. The sound booth tests the effectiveness of the implants by immersing the person in sound then instructing them to only repeat the voice heard from one speaker that is talking to you while there are varying levels of background sound, this allows the engineers to test their products on Cochlear Australia has had recipients. significant impact on how hearing implants are used and made and the importance of what the employees do every day can be shown in this video where Jonathan is hearing his mother's voice for the first time.



Year 10 were also taken on a tour of Macquarie University. We were shown around campus and given examples of degrees which required science and maths as well as the ways in which







you can get into university. Overall the excursion was interesting and will assist us in our studies in the future. Cara Clapham and Olivia Murray.



Year 7 STEM Project

The NSW Board of Studies ('Bostes') writes ...

"Science, Technology, Engineering and Mathematics are identified as essential areas of study for Australia to maintain a high quality of life. Future prosperity depends on students studying in and across these areas in order to foster scientific and technological developments."

"STEM, drawn from the four disciplines of Science (S), Technology (T), Engineering (E), and Mathematics (M) recognises the importance of this integration and its significance for Australia's competitive future. These four disciplines are also referred to as the 'Pillars of STEM'."

So, to achieve these aims, our current Year 7 Extension class has embarked on a STEM project of their own. A double period per cycle – one period each from Maths and Science – has been reallocated to the project, which has been supervised by Meg Winter from the Science Faculty and myself. The students worked collaboratively, in pairs, in our new Learning Space.

Their brief was to produce a video game ... but not just any game! It had to reflect their interest in an issue of their choice related to environmental sustainability. The project involved a coding 'language' called "Scratch" which enabled the students to manipulate their characters through a series of ordered movements and commands.

Before creating their game, students were first introduced to the central STEM concepts involved in the project. These included investigations into just some of the many ways in which humans have impacted on the environment. They also looked into the role of the engineer, with a particular focus on software engineering. Having decided on their own topic, they created an 'Infographic' (which looked WAY better than the "old school" poster projects I used to make!!) enabled by the templates available on the *Piktochart* website.

Once they had understood the possibilities offered by the Scratch software, students were able to create a storyboard outlining each sequence in their game and the actual game developed from there.





The project is conducted over the entire 2nd semester, so development continues. I can't wait to ... "let the games begin!!" Nigel Stoyef

Newport Public School

Newport Public School encourages student input into the decision making processes of the school through School Parliament which is led by the school Captains and eight Ministers. This year, we have had an extremely productive leadership group who have worked in the best interests of all students in the school. They have demonstrated a kind, selfless leadership style, enriching the wellbeing of the school community by leading through example and representing the ideas of their peers to the P&C committee and senior executive team. Below is our final Parliament report for the year, written by students, which explains all of Parliament's achievements for 2016. In addition to their accomplishments, they have ideas and projects unfinished, which they will ask next year's leadership group to pursue.

Parliament Report Week 6, 2016

Thank you Year 5 for attending this Parliament. In this meeting we presented a summary of achievements for the year.

What a year, Year 6 and the Ministers have achieved so much as a team. Every Parliament Minister has worked to be the best they can.

This month we were lucky to have Meg Minkley paint our wonderful mural which is the Year 6 gift to the school. The ministers and a group of Kindergarten students talked about and drew pictures with Meg to give her an idea of what to paint on the wall. Meg drew two samples that could be used. Everyone in Parliament was extremely pleased to see students'

ideas combined into interesting drawings that will decorate our school.

The next big motion that was carried was about changing the sport house captain voting system. The Sport and Leisure ministers said that the teachers should vote as well as students to ensure candidates are elected on leadership skills rather than popularity. This motion was unanimous and was passed easily. Mr Hearne spoke with the teachers, and as you may have read in last week's Natter, the system will come into effect in Week 8.







This year we had two mufti days, crazy hair day and positive slogan day. The money from crazy hair day went to Stewart House and the money from positive slogan day went to the Year 6 gift (the mural).

To keep our school environment clean and healthy, students can bring in their own plastic cups to use when they buy a slushy from the canteen. Instead of buying single use plastic cups, we can use plastic cups from home, wash them and re-use them next time. If everyone is able to do this, our school won't produce as much plastic rubbish as it does now. We would like to thank Tammy in the canteen for supporting this initiative.

After the motion of having Art as a RFF subject was carried last term, the Wellbeing ministers passed this idea on to Mrs Deratz, Mr Hearne and Mrs Baldi. They have assured us that they will consider this idea as they plan classes and subjects for 2017.

The friendship seat was another improvement we were able to make to the school. If children are feeling lonely, they can now sit on the yellow and white seat on the 3-6 side of the school or the painted seat near the kindergarten rooms. Everyone knows that children sitting on these seats would like someone to play with and we can ask them to join in our games.

As a group we are most proud of the veggie garden that was put in place at the Working Bee. This was a great achievement. We believe that this was a great idea as children at our school will be able to learn and have something to be responsible for. It is a legacy that will remain at school for many years to come. After unsuccessfully applying for a Teachers' Mutual Bank grant we would like to thank NOOSHC and the P&C for giving us \$4,000 in total to contribute towards the veggie patch. We are grateful that they listened to Emma's request to help us with funds from the Olympathon. We would also like to thank everyone who came to the Working Bee to volunteer their time to help build the garden.

As many people know, we sent an audiobook to a Mia from Hardbord Public School as a way to support her. We wanted to let Mia and her family know that they are in our thoughts. 12 girls recorded a page each of a beloved book called Mr McGee goes to sea to make the audio book. We hope Mia enjoyed it.



Grounds and Environment Ministers worked hard to put paper towels into the bathrooms as children didn't like having to wipe their hands on their uniform. Ema and Hugo had to speak with Mr French, Mrs Holden, Lenor and Oscar about the logistics of buying and installing the dispensers, and managing the rubbish. We now have paper towels in the bathrooms.

The ideas that the Ministers of Parliament 2016 would like the 2017 Ministers to continue to work towards is to have volley ball as a school sport again and to have a formal Languages program introduced into the school. Written by Taj H and Otyliah C

In bringing many ideas to fruition, the leadership group have learnt the importance of persistence, hard work and the significance of clear lines of communication with all stakeholders. The captains and Ministers, as well as the Year 6 group, have developed their team working skills and learnt problem solving and resilience by accomplishing real world goals. In achieving many of these, they had failings and setbacks. It is our hope that the skills they have learnt through the Parliament program and the memories of leaving our school in a better place than when they started in Year 6, are ones which they hold on to and continue to build upon as they enter the next stages of the their education. Adam Hearne

Narrabeen Lakes

White Ribbon Day

White Ribbon Day was recognised at Narrabeen Lakes Public School, by holding our annual White Ribbon Breakfast.

This year, several fathers from the school cooked up a storm on the BBQ, serving bacon and egg rolls to the school community. Another group of parents sold baked goods, while the male staff members sold White Ribbon merchandise, including White ribbon pins and wristbands. Proceeds from the day are being donated to a local women's refuge.

Prior to White Ribbon Day, teachers had discussed with their classes the significance of the day and viewed websites, including #Like a Girl. Students created large paper white ribbons, which they decorated with messages about treating all people with respect and dignity.

On White Ribbon Day, these paper ribbons were displayed on the front fence of the school, along with hundreds of white balloons. Also displayed on the fence were 5 black boards and three large black banners. During the morning session of class, students in Years 3-6 used white handprints to create 5 large White Ribbon symbols and signs saying "RESPECT", "VIOLENCE- NO WAY!" AND "I SWEAR —". The event was a huge success, with many members of the public contacting the school congratulating us on our initiative.





Future Learners Workshop

Imagine if the head-honchos at Ikea and the big-wigs at Apple partnered together to design a modern school. What would you expect to see? Surely a school like this would have amazing open-plan classrooms that are adaptable for a variety of learning sessions. There would be a range of technologies available to students to empower them to have direction in their learning. It would have colourful, comfortable, multi-purpose and movable furniture that promotes the idea that education is not fixed and static; rather it is dynamic, shifting and always changing. Well, if you were to visit Anzac Park Public School in Cammeray you would find just this. It is modern, sleek and impressive; truly a school designed for the future. But, what do the bells and whistles of modern school design matter if the pedagogy is stuck in the past? This was the overarching question that gave rise to the Futures Learning Conference that was recently held at Anzac Park.

With a focus on learning in the future, new and emerging pedagogies and innovation, teachers from all over Sydney attended the conference to find out what education may look like in the 21st Century. Workshops ranged from helping teachers foster creativity in the classroom, leveraging technology learning and connecting the classroom to real-world issues. Teachers attended four workshops of their choice over two hours to garner an insight



into how new pedagogies can best help students in the modern world.

Representing the PCS, Kylie Kirkland and Liam Chapman from Narrabeen Lakes Public School presented a workshop on Inquiry Based Learning. Sharing from their trials and errors in implementing Inquiry Based Learning projects at Narrabeen, Kylie and Liam's session focused on how to foster a spirit of wonder in the classroom and grow a culture of inquiry across the school. It was a proud moment for the Narrabeen teachers who felt privileged to share their vision for what a 21st Century classroom can look like.

Illuminate

In term 3 of 2016, Narrabeen Lakes Public School held our first 'Illuminate' festival. Students, staff and parents worked together to transform the school grounds and classrooms into our own version of the popular Sydney Vivid festival. The team, headed by Mr Ian Phillips, Mrs Heidi Hinte, and parents Ziggy Ziegler and Nadine Newell, coordinated art work displays, performances, lighting and entertainment, to showcase the exceptional work of our staff and students. It was a very successful evening enjoyed by the children, their families, staff and the local community.







Narrabeen Sports High - Lego, Dance and Games

3,2,1...Lego

Narrabeen Sports High School hosted the annual Northern Sydney Regional First Lego League Tournament and what an exciting day it was with over 30 teams competing. Teams had to design, build and program a Lego robot to complete a series of up to 15 missions. They also had to develop a solution to a global problem based around the theme of Animal Allies. Teams presented their ideas to a panel of judges.



Throughout the competition, teams were judged on their adherence to the *First Lego Leagues* core values, including teamwork, Coopertition, and Gracious Professionalism. Congratulations to all the teams and in particular the amazing team from Narrabeen Sports High School whose performance was a huge improvement from last year.



Dance, Dance, Dance

Congratulations to our talented Academy Dance students. Their hard work was showcased at their awesome annual concert.











Breaking World Records

It is official! Our dancers are part of the world's largest variety act ever staged - School Spectacular 2016. Guinness World Records made it official with 5322 participants.



Come Play Our Game

Thank you to everyone who came to our "Come Play Our Game" Sports Academy afternoon yesterday! We had a great number of potential future students come along and enjoy an afternoon of sport. Thank you to all our amazing teachers, students and Academy Coaches for helping make the afternoon such a success! Thank you also to Sydney FC, The NRL, Manly Warringah Sea Eagles and Jake and Tom Trbojevic for their support.







Music Education at Narrabeen North

Students at Narrabeen North Public School have been exposed to a range of new and exciting music programs in 2016.

Miss Smith, a specialist music teacher has been engaging students in Early Stage 1 and Stage 2. Stage 2 has been singing, dancing and playing music. They focused on African music, with songs and dances from African countries like Ghana, Nigeria and Zimbabwe. They composed their own versions of a call and response song, sang as classes, in groups and individually. They are now focusing on sounds and silence, and being introduced to music notation through lemons and limes - it's a fruity adventure! Kindergarten has been finding their beautiful singing voices. Every lesson each child sings their name to the class. They have learnt many songs to help build singing and language skills.

This semester two teachers from Narrabeen North Public School were involved in the National Music Teacher Mentoring Program NSW. Mrs Hamilton and Ms Cantrill took part in activities in the classroom as part of the Creative Arts curriculum. The program utilised the skills of Penny Burt, a specialist music teacher from Forestville Primary School to mentor the teachers. Singing was used as the basis for the lessons. Once children learnt to sing a range of songs across different genres, they could begin to read music and dabble in composition. This was enhanced by the teaching of the recorders across Year Two. The mentoring sessions began with observations of the mentor teacher with different classes, a sharing of resources and individual goal setting for the class teachers. Each week Penny would visit the classrooms and teach a lesson. This culminated in each grade performing at a K-2 assembly. During the process, Mrs Hamilton and Ms Cantrill also led sessions with the Stage 1 teachers at each grade meeting, and held a TPL for all K-6 staff. This was designed to pass on the knowledge and resources so that all NNPS staff

could embrace the teaching of music throughout the school.





This program is designed and directed by Richard Gill OAM to increase access to quality music education for all Australian

primary school students. "Music requires the most intensive concentration and listening. When children listen with direction and concentration, their focus goes up spectacularly...and the evidence points to the fact that a structured program of musical education has benefits in all learning."

Finally, our senior band had the opportunity to perform with the fabulous Police Band and then combined with the Year Two choir and the Town Hall choir to play some Christmas favourites at the opening of the Kmart Giving Tree.

All the students involved in the music education programs have thoroughly enjoyed the many opportunities to perform and learn.

Elanora Heights Maths Challenge

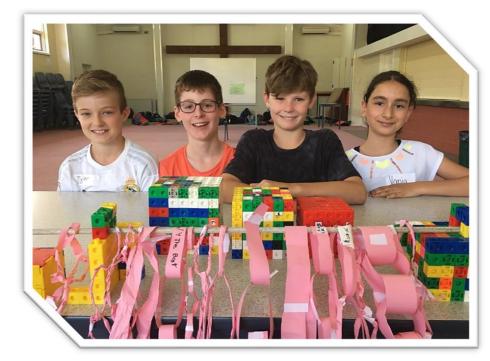
Hypothesising, testing, experimenting and looking for patterns was all in a day's work at Maths Challenge Camp this term! Elanora Heights PS students were part of a group of more than 70 year 5 students from PCS and NBLA schools who attended the 2 day camp at Elanora Conference Centre. Held annually, this camp is run by local primary teachers with a passion for mathematics and the creativity it offers.

Students were asked to think like mathematicians when solving problems inspired by Plato, Escher, Pascal and Fibonnacci. They all found it challenging, and were excited for more!

There were two goals for the two days at camp: to meet new friends, and learn how to work like a mathematician.

To do this the students had to:

- Define the problem
- Experiment
- Collect and organise data
- · Look for patterns
- Hypothesise and test, and
- Reflect on their ideas.



The culminating activity, creating a life-size geodesic dome, put their cooperation and visualisation skills to the test. Luckily they had all worked well on their problem solving skills, and made new friends to solve this big problem together.

According to Vania Z of Elanora Heights PS (pictured far right), one of the things she enjoyed the most about this camp was hearing about the phrase *Nullis inverbia*, meaning 'take nobody's word for it...prove it'.

Writing in our school newsletter about her experience, Vania reflected: "I will definitely make sure I remember this because it means a lot to me and encourages me to keep on going when I am solving a problem."



Barrenjoey High School

Year 9 Extension History from Barrenjoey High School were given the task to design a Remembrance Day commemoration in 20 minutes. Their target was to engage their peers in the commemoration of all conflicts and to get the school thinking about the true cost of war.

As a class they designed a memorial in the front foyer of our school with soldiers' profiles and the symbolic poppy. Some students have done a graffiti art memorial in the walkways of our school. Others designed discussion questions for students to consider with the assistance of teachers and war music such as Redgum's 'I was only 19.' But the most creative commemorative outlet was the design of a video now on YouTube which quizzed a cross section of students on why people might enlist and what commemoration means to young people.



The video was **SO** good that a man from News Corp contacted our school and asked for permission to share it on the ANZAC Live facebook page. Not only did the video feature on the live page but it was viewed close to 12,000 times, it was liked 202 times AND shared by 134 people varying from councils across Australia to other newspapers such as the Courier Mail.

If you haven't seen it yet - jump on and like ANZAC Live and like and share our video!!

You can also find it on the Barrenjoey High Life Facebook page or at the following URL on You Tube Click on the link following to see the video: https://www.youtube.com/watch?v=M2 mxQ2crY4.

This group of students aimed to reflect our school ethos of Respect, Effort and Challenge into not only their projects but also as an applicable motto for soldiers and war efforts. The next stage of our commemoration is to craft a letter and care package to current servicemen serving overseas. Well done Year 9, you guys are awesome, I am very proud of you all. **Megan Dee**

Cromer Public School – Sensory Garden

In 2015 the Student Welfare team under the guidance of Mrs Cathy Scriven, discussed ideas about using the school grounds to create a defined "quiet space" for students to use in the playground. Staff wanted to provide students with experiences to make links between social and emotional learning and the environment. Out of the discussions, emerged Cromer's new Sensory Garden.



The Sensory Garden has been a long-term project over the past eighteen months. The school community has been involved in developing the garden. Wider community members, including artists contributed resources, and some parents gave donations. During its eighteen-month creation, students watched the elements and items taking shape. One of the important aspects of the garden was using recycled materials which fitted with the environmental focus of the school.

Cromer's Sensory Garden is an outdoor learning area that has been designed not only to stimulate the senses but also to incorporate social and emotional development. It's being used as a calming place and as a gentle way to stimulate the senses.



The design of the garden allows students to experience play through the senses. This stimulation occurs courtesy of plants and the use of materials that engages the students' senses of sight, smell, touch, taste, and sound. It was important to feature elements that appealed to all the five senses. **Important** consideration was given to visual stimulation, or sight and sound as it is crucial to creating a calming environment. Man-made additions such as wind chimes and the bird bath, added to the sounds of the garden. Smells can trigger a wide

range of emotions, and plants were chosen with care to release their scent naturally without the need for touch. Edible herbs and vegetables were planted to explore taste. Colour was also carefully thought out to provide a visually exciting place to visit.

Teachers are observing students taking on new challenges in the garden. They can now play with a large chess set; there are opportunities for cognitive and experiential thinking and for the quiet space of reflection. All age groups of students are enjoying the garden. Students are supervised in the garden and respect it as a significant place for learning, and experience of nature.

Classes are also using the Sensory Garden for different lessons. For example, students used it recently for a Maths lesson. Each student was given a metre length of string for a series of measurements. The school's Environmental Club made up of students from Years 3 to 6, during lunchtimes, volunteer to water, plant and mulch under the supervision of Mrs Sharyn Lawler who is committed to developing the school gardens.

Wheeler Heights

Pink Stumps Day

What a spectacular day! A celebration of colour and community as the whole Wheeler Heights Team banded together in support of this important initiative.

The children looked spectacular in pink and appeared even chirpier and more cheerful and polite than their usual wonderful selves! The staff and many parents also looked resplendent in pink.







The canteen was the hub of the day and the wonderful team of mothers who volunteered for the day had the area looking spectacular. Behind all the balloons, streamers and bunting was a mouth-watering selection of pink cupcakes, jellies, buns, watermelon and treats. For lunch the ladies cooked up a metric tonne of sausages (or nearly!) and the students enjoyed a wonderful lunch bag of goodies. Over the lunch break much of the school acted as intrigued spectators while Mr Scotter's XI took on Mrs Sly's XI. The teams, made up of a few staff members and the talented players from the Senior Boys and Girls Cricket teams displayed sportsmanship, skill and joy in a 20/20 style game, commentated by a selection of dubious characters!

The final event for the day was the exciting raffle draw which saw over 10 students win prizes including Lucas in Kindergarten who took home the major prize of a Sydney Sixers jersey signed by Brett Lee, and Sophie (Year 3) and Harry (Kindergarten) who walked away with a fabulous beach cricket set each.

The school is very proud of the way in which the community come together to sponsor and boost this event in support of the McGrath Foundation's efforts to raise funds for Breast

Cancer research and treatment. A massive thank you to all involved. We will announce the total of the proceeds which will be donated to the McGrath Foundation in next week's newsletter. Mr Williams





School Spectacular 2016

Miss Collier, Mrs Radom and 46 students from Year 1 to Year 6 recently attended the 2016 School Spectacular performance at Sydney Olympic Park. And I'm sure you can guess, it was spectacular!! The performers were outstanding, the sets were incredible and we had a blast dancing along to the music! Although we didn't spot our very own Mikaylah P., we were able to be witness the breaking of a world record! The School Spectacular 2016 set the new world record for the largest amateur variety act, with more than 5000 students involved! AMAZING!!!

Miss E Collier, Mrs J Richards and Mrs Radom

