



The Weekly Pines

Northern Beaches Secondary College

Manly Campus



Academic Excellence ★ Personal Best ★ Giving Back to the Community

Relieving Principal: Ms Kathy O'Sullivan

Deputy Principals: Mr Alex Newcomb
Ms Marisa Carolan (relieving)

25 September 2020 – Newsletter No.18

From the Principal

Farewell Year 12



There was excitement in the air on Thursday morning as the school farewelled our wonderful 2020 Year 12 students. Although the format was a little different this year, the restrictions in place did not lessen the outstanding achievements of Year 12 or this special occasion.

Our incoming 2021 School Captains Eliza Lo Russo and Max Oldham gave their first formal address to the school in their newly appointed role. Student representatives from each year group: Alexander Harvey (Year 7), Alexandra Harris (Year 8), Charlotte Thomson (Year 9), Daniel Martin (Year 10), and Hannah Lovlin and Noah Sawyer (Year 11) shared stories and expressed thanks to our Year 12 cohort for their leadership and camaraderie. Our 2020 School Captains Chloe Martin and Fergus Clarkson, spoke with gratitude when reflecting on their time at

Manly Campus. Vice Captains Lauren Griffiths and Kyle Ambrosius presented the Year 12 gift to the school, a new lectern for the quad, which we look forward to using in the near future.

Thank you to Mr Newcomb, Ms Truong and Ms Rixon who co-ordinated the event. A special thank you to Mr Goykovic for organising the technology and to Bea McGuire and Melissa Soe (Year 11) who successfully set up the live stream, Ms Farrow and Jared Li (Year 11) for taking photos throughout the day and to the Year 11 and Year 10 SRC for helping set up the whole event.

Our staff have enjoyed being a part of the educational passage of our Year 12 students over the past six years and have delighted in watching them develop into the incredible young adults that

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they are. Special thanks to Fiona Brien for the nurturing and support she has provided to Year 12 and their families during their time at Manly. Thank you also to their Deputy Principal Ms Alex Newcomb for his exceptional guidance of Year 12 throughout last three years of their school journey.

Year 12 have successfully navigated through their senior years in the most difficult of circumstances and the example that they set for us all during this time is to be commended. They have been challenged in ways never imagined and have proven themselves very capable in adjusting to uncertain circumstances, displaying a capacity to deal with disappointment, to recalibrate and move ahead. G20, you will long be remembered for your strength, your optimism and your resilience.

Our best wishes go with Year 12 as they make their final preparations for the HSC. Congratulations, best wishes and farewell from everyone at Manly Campus.



[Year 12 Farewell Assembly photos on the website gallery](#)

Year 11 Examinations

Year 11 students are no doubt excited that their examinations finished today and they have the holiday ahead to relax before beginning the HSC in Week 2 next term. Students are reminded to go to their Year 11 classes during the first week back and that new extension courses will begin in Week 2. Subject change forms must be completed by all students who are planning to drop or add a subject.

New Skate Park

It has been brought to Council's attention that students are using the new skate park before school. North Curl Curl Community Centre is one of the busiest venues on the Northern Beaches with people arriving as early as 6.30am, and many hirers who drive in, are elderly.

The Council is concerned, that to get to school, students leave unsupervised skating via the driveway out to Abbott Road, which has a blind corner.

Council can install signs to warn both students and drivers, however, this does not always mean compliance. Council has asked us to advise students and parents that under no circumstances are they to use their skateboards or scooters on the driveway.

Below is a map of alternate exits either on to Abbott Road or Griffin Rd.



Staff Farewells

Today we farewelled Ms Deb Rixon. Ms Rixon is taking leave for two terms before retiring from the Department of Education after 14 years of outstanding service to the students, staff and community of NBSC



Manly Campus. As Head Teacher Wellbeing, Ms Rixon has been responsible for all the engaging wellbeing programs at the school including and not limited to organising the annual camps, peer support, GPs in schools and the Life Ready program. Ms Rixon was also our wonderful careers advisor. We hope to be able to farewell Ms Rixon when restrictions ease.

This term we also farewelled Mr Mick Malone (Mathematics), Mr Bill Baker (Science) and Ms Neda Joyce (English / Drama). We wish them all the best and hope to see them back at Manly Campus in a casual teaching capacity.

HSC Music Nominations

Congratulations to Chloe Leung and Ciyue Ma who have been nominated for possible inclusion in ENCORE, a selection of performances and compositions from Higher School Certificate Music students.

Happy Holidays

I would like to thank all families, students and staff for managing another difficult term. I wish for everyone to have a safe and enjoyable break and look forward to our return in two weeks refreshed and energised for the home stretch.

Congratulations to:

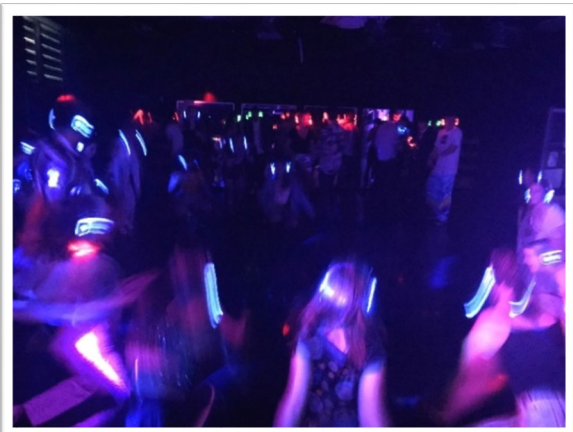
- Leroy Sze (Year 9) who recently won the Gosford UTR Super Series.

In this regular feature, we like to recognize students who have achieved highly in school and community events, competitions and activities. Demonstrations of the school ethos of academic excellence, personal best and giving back to the community deserve to be recognized. Parents are welcome to phone or email the school any achievements that we may not be aware of, for inclusion in The Weekly Pines.

Kathy O'Sullivan
Relieving Principal

From the Deputies

Lasting Impressions



With Year 12 celebrating their last week of school, there has been a rollercoaster ride of emotions; from the sadness of saying goodbye to the joy of seeing them have such fun; bonding over shared experiences and memories. Underpinning these

emotions was a sense of hope that the students were able to do this in a respectful and good-spirited manner; and this is exactly what the G20 cohort was able to demonstrate.

All the celebratory activities were well organised - with no negative impact on others and the environment. In their words, actions and behaviours, the students were able to say 'thank you' to the rest of the school community. In their final celebrations, G20 have embodied what is the 'Manly Vibe'; fun, creativity, inclusivity and respect - leaving a legacy our future generations can look forward to experiencing as well.



Bon voyage G20!

Mr. Newcomb, DP - Year 8, 10 and 12

Ms. Carolan, DP – Year 7, 9 and 11

Apologies

An amendment to the SRC 2021 acknowledgement in the last newsletter: two student names and photographs were wrongly labelled and/or omitted. Congratulations also to Alexander Harvey and Liam Llewellyn (Year 8 2021 SRC members).

Year Adviser Term 3 Reports

Year 12

Year 12 - thank you for six glorious years – it's been a blast! As you are G20 and it is 2020, obviously I have to tell you the Twenty Things I Love About You.....

1. Your resilience – it's been a rollercoaster of a year and you have managed to keep both your spirits and your motivation up, your thought and compassion for each other central and your humour are constant coping tool. Your ability to roll with the COVID punches have truly been inspiring – it cannot crush your cheeriness, your connectedness and closeness – thank you Tik Tik, Zoom and Google Classroom.
2. You have taught me that support comes in many forms – good humoured bants, rough housing in the corridors (you know who you are), educating yourselves about how to best support a friend in need, basketball therapy, gym challenges, Tik Tok challenges, library 'study groups', engaging in procrastina whiteboard sessions as well as legit and often illegible peer tutoring in the study pods (in between the odd shared earpod Netflix session)
3. I love that you have turned my hair grey – literally!
4. You have taught me the incredible motivating power of food – When I asked how can I get students to become Student Wellbeing Advocates - pizza Miss. What will encourage students to come to the library after school – decent snacks Miss. Uncanny ability to spend more time eating the afternoon tea in the library sessions than actually studying.....we are fuelling our brains Miss. Go G20
5. That you are all now huge Proclaimers fans
6. That you know the importance of gratitude and have demonstrated that so beautifully in this last week of school with your thoughtful and generous words, actions, cards and gifts – I am so very proud of you all.
7. That you have shown me that the slab has magical powers of healing and meditation – the more time you spend there, the more ping pong you play, the more you hang out with your crew, the more relaxed you are about most things. It's a remarkable place.
8. I love that yesterday I finally saw you dance. I was very worried, as despite showcasing my best mum moves and having a banging selection of tunes at the start of most Year Assemblies, you mostly danced on the inside. However, yesterday at the Manly Vibe Dayclub, I definitely saw some that you of have borrowed my some of my moves – you are welcome!
9. Your incredible ability to stifle the urge to roll your eyes when I mention *The Five Ways of Wellbeing* or the *Pomodoro Method* or *Chunking* for the millionth time – well done G20 well done. It shows an astounding level of self-control and restraint – both admirable qualities that will stand you in good stead for your futures.
10. That *Cornell Notes* have only ever used in order to impersonate my accent – badly!
11. That you have absorbed several lessons learnt at Year 9 and Year 7 Camps, including teamwork (Year 7 mud pit challenge), resilience (who even slept after that terrifying Year 9 camp night-time tale?) and gratitude – for your Mum or Dad's home cooking, for the invention of insect repellent and for not having to sleep in a cabin with five to eleven other hormonal sweaty teens every night.
12. Your kindness.
13. I love that you are Band 6 clappers – six years of Year Assemblies and still Kindy clapping is the only way to get you to quieten down.
14. That you will use any excuse to don a non-uniform outfit – Pinestock, Carnation Day, Wear it Purple Day, Enviro Day, Chrismanly, Urban Challenge – you go fancy.
15. That you are a such an incredibly talented bunch – some of you are athletes representing the nation, the state, the school or the year group as our resident quad handball warriors – Mathletes – living the Manly dream and shattering gender stereotypes as some of the top Mathematicians in the year are female. Musicians, singers, actors, artists, debaters, writers, poets, film makers. As Maya Angelou notes, "*diversity makes for a rich tapestry, and we must understand that all the threads of the tapestry are equal in value no matter what their colour*" – you are diverse in talent and so very colourful in character.
16. Many of you are creatives and innovators – your Major Works creations are a wonder to behold and your teachers and parents would like to thank you for testing the parameters of our faith and fortitude.
17. Your parents incredible support – there is a wee gift in the packs that your Year 12 are bringing home (if they don't lose them on the bus....) and I have added my favourite poem by Kaleel Jibrahn that has given me great solace when my

children finished high school and flew the nest (metaphorically if not literally). You have been incredibly strong and stable bows and we all – the school, Mr Newcomb and I, and most of all your beautiful children thank you for your love, your care and your strength. When you get home Year 12, give your folks a hug and thank them for all they have done for you, and will do for you in the next few weeks, months and years.

18. That you can't get enough of my Study hacks so I have created a mnemonics mash up of English HSC text quotes to help you nail most subjects -

- Like the HSC, we will start with English Advanced
- You are all like Prince Hal *"All plumed like estridges that with the wind, Baited like eagles having lately bathed, Glittering in golden coats like images, As full of spirit as the month of May, And gorgeous as the sun at midsummer, Wanton as youthful goats, wild as young bulls"* – accumulation of metaphors elucidating how ready you are for the HSC
- Just remember that the *"few cubic centimetres inside your skull"* - Biology - are yours to "doublethink" - surely that's Society and Culture - and remember that *"Freedom is the freedom to say that two plus two make four"* - well that's Ext 2 Maths covered, and of course, *"Who controls the past, controls the future: who controls the present controls the past."* - all the Histories
- PDHPE tips from John Donne *"My pilgrimage's last mile; and my race, Idly, yet quickly run, hath this last pace"*
- Donne again for Geography "the moving of the earth brings harms and fears" - way ahead of the environmental movement there
- Physics - *"The earth is as old as we are, no older"* - The Party's controversial ideas about Big Bang Theory
- Economics – of course *"the Ministry of Plenty"*
- Music – *"Oranges and lemons says the bells at St Clemens"* that covers Music and composition
- Keats has you covered in VA with *"beauty is truth, truth beauty"*
- Chemistry – John Donne's *"poisonous minerals"*
- And on the day, you wake for your first exam, make sure it's with *"Shakespeare on your lips"*

- We have to finish with important life advice for The Proclaimers

19. For you *"do the best to do the best you can"*
ahuh ahuh ahuh ahuh

20. For me – *"I'm on my way from misery to happiness today"*

It's a juxtaposition of emotive language connoting the complex combination of contradictory feelings in the protagonist as she navigates through challenging times. I feel incredible happiness that you are all at this glorious stage of life about to step into your next chapter, and I feel absolute misery cos what am I going to do without you?

Get my marking done - maybe? Fret less - definitely?
Wear something other than the Year 12 jersey - doubt it. But, my goodness I will miss you terribly and will definitely walk 500 miles to haver with you.

Love

Ms. Brien

Year 11

With the completion of Yearly Examinations and the end of Term 3, Year 11 have now officially moved onto Year 12. YAY!

Term 3 was a busy one. The Year 11 into 12 interviews provided myself, Ms. Rixon and Ms. Carolan the opportunity to spend some one-on-one time with G21 chatting about their progress in Year 11, their goals for the future and their strategies they have implemented (or planning to implement) to ensure that they reach these goals. Whilst some students had very definitive goals and careers in mind, many were still weighing up their options and bouncing around ideas about where their future selves might land. As I told many of the students, they do not need to have a clear vision of their roadmap to success in their minds eye yet, they just need to lay down the foundations to give themselves choices.

Later in the term, Year 11 were treated to a fabulous hour listening to amazing speeches from the students who nominated themselves as candidates for SRC exec. A big congratulations to the following SRC executive: Max Oldham and Eliza Lo Russo (Captains), Noah Sawyer and Hannah Lovlin (Vice

Captains), Chloe Bracher, Lea Hartley, Amelie Letchford, Vivienne Paduch, Daniel Shi and Alex Yuen. I am very proud of our selected representatives of the school and I am confident they will lead us into a successful 2021.

I would also like to take this time to congratulate all the Year 11 students who entered in the Australian Society of Medical Research (ASMR) High School Quiz. Out of 454 participants throughout NSW, our very own Genevieve Watson took out 2nd place. Well done!

I wish everyone a relaxing holiday break (parents included) before we come back next term, ready to take on Year 12! This holiday is an important moment for resting, recharging batteries and reflecting on progress and goals going into what will be an exciting and challenging time. That being said, a very quick reminder that the Year 12 2021 Information will be delivered to students on Tuesday 13 October at an extended year meeting. Parents and caregivers will be given a link by Thursday 15 October to the presentation to view at their leisure.

Happy Holidays!

Ms Truong

Year 10

Year 10 students have proven their resilience this term and have achieved their best in a wide range of academic tasks including assessments, in-class essays, English speeches, ILP seminars, class tests, assignments, and some sitting for Year 11 and external examinations as well.

One important event during Term 3 was the Year 10 into 11 student interviews held in Week 5. Students were asked to reflect on their current progress and future career paths. After formal interviews with staff, students are more confident that their subject choices for Stage 6 are relevant to their interests and abilities as well as their career and study aspirations post school.

Thank you to all the teachers involved in the interview process: Ms. Herft, Ms. Rixon, and Mr.

Newcomb. The knowledge and expertise of these staff members are much appreciated by all students.

Well done to students who have already completed their 20 hours of the Volunteering Program. Year 10 students started mentoring Year 7 students in the PALs program, which aims to help students develop academic resilience including self-awareness, problem solving, bouncing back from adversity and time management strategies. Unfortunately, due to COVID restrictions, this program had to cease but not before the fabulous Year 10 students made an impact with the Year 7 students. Please continue to keep an eye on daily notices for volunteering opportunities during Term 4. Final submissions of the Volunteering Booklet is due Week 3, Term 4.

I would like to congratulate the outgoing SRC representatives for the fantastic job they have done throughout the last twelve months. At the SRC Induction, the following students are invested as the new SRC representatives for their fellow students: Sam Capell, Gina Harrison, Hugh Huang, Audrey Liu, Jenna Kim, Daniel Martin, Bezi Saunders and Krystof Zajicek

Please continue to check in to the G22 Google classroom for any updates and to look after each other. I wish all a relaxing, well-deserved holiday and look forward to the last term of Year 10, with Year 11 just around the corner.

Mr. Crooks

Year 9

With another term under our belts, G23 managed to make it ¾ of the way through what has to be said to be one of the craziest years on record! We've had remote learning change back to face to face learning, albeit with some very strict social distancing rules. Through all these restrictions in place for year meetings, year group area zones, playground adjustments, band and choir limitations and so forth, we have managed to make it through Term 3 unscathed and, none the worse for wear.

2021 SRC elections were held this term and the speeches, held via Zoom were of an exceptional standard and very impressive. Congratulations to

our Year 10, 2021 SRC members: Genevieve Bauder, Riddish Chanda, River Fitzgerald, Michael Hawkins, Melissa Soe and Isabelle Stapf-Giannakis!

We had a new Careers and Wellbeing workshop held over 2 days in Week 8, where a presenter pre-recorded instructional video sessions that the students worked through in class groups, guided by a teacher. These workshops showed the students many useful tips and techniques to better themselves in the future. I would like to suggest to any G23 students who are applying for jobs in the future, that I very happy to be a referee for those applications if requested.

Lastly, on behalf of G23, I would like to say good luck and best wishes to the current Year 12 G20.

Have a great Holiday G23 and I look forward to seeing you all again in Term 4 2020!

Who are we? G23!

Mr. Goykovic

Year 8

This term, Year 8 has engaged in a variety of activities at school.

Academic Achievements were acknowledged, with Hannah Chan receiving an Education Perfect 2020 Maths Championship Gold Award for academic excellence and commitment to learning including recognition for her tremendous efforts during COVID-19 Online Learning.



On the sporting field, our students participated and thoroughly enjoyed the rotating Wednesday afternoon sport sessions in line with COVID -19 guidelines. This has enabled opportunities for greater cohesion within the G24 cohort and strengthening of social networks.

One Term 3 highlight was the Science Techno Museum. Students formed themselves into small teams with the aim to investigate the technical, social and historic aspects of technology and then present their findings imaginatively. Year 8 leapt at this opportunity with enthusiasm and dedication. It was enjoyable engaging with G24 in the creative processes and listening to the students talk passionately about their technology. Congratulations to the three finalist teams who received an Outstanding Award for their impressive and innovative ideas:

- Batteries (1st place: Outstanding Award) – Jocelyn Prevett, Ella Beanland, Harriet Carmichael, Juliet Stephens
- Hydraulic Bridges (2nd place: Outstanding Award) – Charlie Heaton Armstrong, Julien Grillet, Hamish Geraghty, Joel Huxley, Arran Darling
- Evolution of Clocks (2nd place: Outstanding Award) – Lauren Brown, Lily Hundleby, Annabelle Bartram, Leo Jiang



A special thanks goes to the Science staff for their guidance and patience throughout this time.

In a tremendous effort to host the annual SRC event Pinestock, everyone came together in a modified and COVID-safe version ...Frightfest. Well done and congratulations to all of G24, there was a multitude of creative and original costumes and characters.

This term we also welcomed the Year 9 2021 SRC members Sam Daykin, Alexandra Harris, Liam Lehane, Esther Schroeter, Tom Woods and Isobel Young and I look forward to working with them all



over the next 12 months and with the many SRC events.

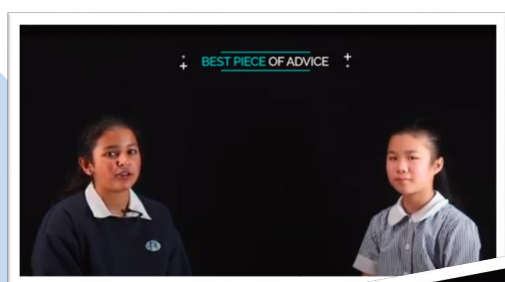
Finally, the Year 9, 2021 Electives Information Evening was delivered online. It was pleasing to see so many students and their parents take the opportunity to discuss their options with various teachers to make informed decisions as they prepare to begin Stage 5. Many thanks to Mr Newcomb for coordinating this successful event.

This term has seen the G24 continue to establish their reputation as a group with a positive outlook and determination to succeed. They have shown themselves to be a resilient and dynamic group and a credit to the school.

Ms. Chandra

Year 7

As we returned to face to face learning, G25 continued to find new ways of demonstrating 'Personal Best' and 'Giving Back to the Community'. The students were asked to provide the FAQ that they had when they first found out they were coming to Manly and 6 students volunteered to represent the responses in a video presentation that will be shown to the new year 7 cohort. A big thank you to Pahandee Kodituwakku, Aarohi Bansal, Jia Rastogi, Cecilia Wan, Evan Cahill and Saksham Sehgal for giving up their time to contribute.



Randomly selected classes formed focus groups to give their opinion on the proposed changes to the current 'Merit' system, providing insightful comments and random students will be selected in early term 4 to provide their feedback and to help evaluate the current programs provided at Manly Campus.

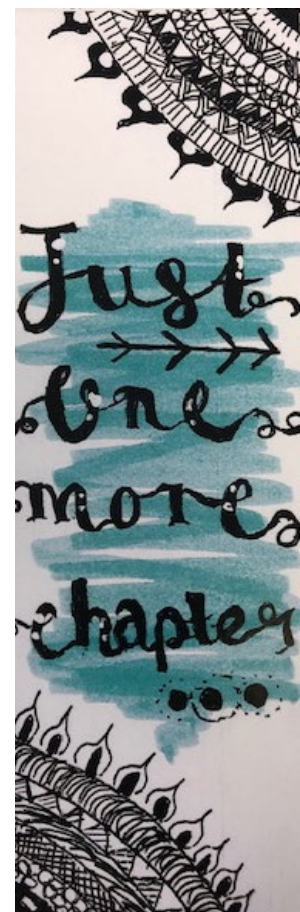
One positive to come from the changes in policy due to COVID was the inclusion of more year meetings. Topics discussed recently included Plagiarism and the Roles of our Boys and Girls Advisers. During these meetings, the cohort always celebrates up upcoming Birthday with facts and figures from the history of the celebrated students birth date, the traits and mannerisms of the student according to the Horoscope and the Chinese Zodiac and we finish off with a round of 'Happy Birthday' as the student receives a cupcake. Some interesting points come from these celebrations e.g. the discussion of the Birthday Paradox when Marlon, Alexander and Lucas all had their Birthday on the same day.

Students also took opportunities in the wider community to show of their talents. For example, Aarohi Bansal's art work being selected for a program on the celebration of reading within the Northern Beaches Council library service.

In my own classroom teaching of G25 students, I cannot recall giving so many full marks for the musicology aspect of their first music assessment-truly amazing! But I thought I would finish my report with some wonderful poetry from Ms Koo's English class. The following two examples were submitted as part of the Red Room Object Competition, well done Kat and Michael.

Poem by Kateryna Shalopa

*Your eyes were the only thing to ever happen to me
And sometimes I wonder,
If the real story
Was actually in them.*



*It pains me to know
That their grey was once baby blue
But I suppose that I'm a hypocrite
As my life has slowly yellowed,
Worn down from being dragged across your universe.*

*It makes sense that your eyes would've matured,
After all,
The world inside me could never rival the chaos of yours.*

*Although you tear through galaxies,
You've never torn me apart,
But now I wish you will*

*I think we both know that my pages
Cannot change colour with you*

Poem by Michael Elliot

*Nine penguins, frozen in time,
Nameless, immobile, forever looked upon.
Encased in plastic, submerged in cold-blooded water,
Always moving home, gathering dust along the way.
A mimic of life, yet not really living,
A memory from far, far away.
As their living twins grow and grow old,
These dome dwelling sculptures are stuck in the midst
of time.
But when a storm is unleashed inside, a glimpse of life merges,
Through the cascading confetti thought to be snow.
But this world is an illusion,
And the penguins are mere paint.
Still, as time grows old,
Memories remain.
Memories, that shall never be forgotten,
As nine penguins, frozen in time,
Lie there, in the dome, forever lying dormant.*

I wish G25 a safe and relaxing holiday!

Ms. Herft

Cross Country Challenge

The Great Australian Cross Country Challenge Results

Congratulations to the NBSC Manly students who took part in the virtual Great Australian Cross Country Challenge during Term 3. The following students placed in the Top 10 in NSW and Australia.

Name	Place in Australia	Place in NSW
Dylan Potgieter (Year 8)	24th	10th
Logan Campbell (Year 10)	1st	1st
Benjamin Hackney (Year 11)	10th	6th
Hannah Farrugia (Year 12)	9th	3rd

**Scott White
PDHPE**

Year 9 Drama



The Year 9 Drama class have had an unusual year: performing for laptop cameras, performing to empty seats, and leaving uncomfortable pauses where an audience's laughter should be. This week they finally were able to perform for a real live audience! Who were the lucky audience members? Four generous English teachers! In Week 10, Year 9 performed two

versions of a fairy tale - first using Children's Theatre conventions and then repeating the scene as a subverted (fractured) scene evoking a dark atmosphere. 'The Little Mermaid' group creatively appropriated the song 'Kiss the Girl' in a moving scene about the plight of refugees while the 'Cinderella' group cleverly satirised their plot to comedically comment on the consequences of democracy on third world nations.



Thank you to Ms. Munro, Ms. Giuffrida, Miss Woolven and Ms. Franic for watching. Congratulations to the Year 9 Drama class for their collaboration and creativity to produce engaging and thoughtful performances!

Miss Campbell

Science

Ex Student News

I received the below email yesterday from one of my ex-students. I am amazed and thrilled to think that one of my students has taken his learning from Manly and gone on to great heights. He studied for his PhD at the same university that Rosalind Franklin worked in when she found the double helix structure of DNA!

I would like to share his email with you:

Dear Ms Maggs,

This is Michael Webster, who I hope you will remember from your biology classes 12(!) years ago.

I wanted to get in touch to share some updates from my end that I thought you might find interesting.

I have been a postdoc researcher in Strasbourg for the last 2 years, and before that I did my PhD in Cambridge. I have been studying gene expression with electron microscopes, and this week a paper I wrote has come out in the journal Science, which has been very exciting.

Given that I first came to struggling over what the words 'transcription' and 'translation' meant when I was sitting in the back row of your classes, I hope it might be satisfying for you to know that those lessons have undoubtedly been worth a great deal to me! So thank you for both the facts and the enthusiasm for biology, that have made no small part in sending me in this direction with my work. I've attached the paper in case you would like to browse it.

I have also become a father 2 months ago. We have a baby boy called Hugo who is doing really well. I've also attached a photo of us.

I hope you and your family are very well.

Best regards, Michael Webster

He has included a copy of his latest published research paper with the abstract:

Structural basis of transcription-translation coupling and collision in bacteria

Michael William Webster^{1,2,3,4*}, Maria Takacs^{1,2,3,4*}, Chengjin Zhu^{1,2,3,4}, Vita Vidmar^{1,2,3,4}, Ayesha Eduljee^{1,2,3,4}, Mo'men Abdolkareem^{1,2,3,4}, Albert Weixlbaumer^{1,2,3,4†}

Prokaryotic messenger RNAs (mRNAs) are translated as they are transcribed. The lead ribosome potentially contacts RNA polymerase (RNAP) and forms a supramolecular complex known as the expressome. The basis of expressome assembly and its consequences for transcription and translation are poorly understood. Here, we present a series of structures representing uncoupled, coupled, and collided expressome states determined by cryo-electron microscopy. A bridge between the ribosome and RNAP can be formed by the transcription factor NusG, which stabilizes an otherwise-variable interaction interface. Shortening

of the intervening mRNA causes a substantial rearrangement that aligns the ribosome entrance channel to the RNAP exit channel. In this collided complex, NusG linkage is no longer possible. These structures reveal mechanisms of coordination between transcription and translation and provide a framework for future study.

If anyone would like to read the paper in its entirety, see Ms. Maggs.

**Ms. Maggs
Science**

Careers Workshop

Student Report

In Week 8 of Term 3, Year 9 attended 5 x one hour career workshops run by Kathryn Taylor from Wellbeing Australia. These lessons helped us discover our strengths and learn skills instrumental in obtaining careers and working efficiently in groups. We discovered our strengths, learned how we can use them effectively, how they can become weaknesses, how they relate to our attitudes and interests towards school subjects, extra-curricular and hobbies as well as how we can use them in school, work and life. Knowing how to use our strengths effectively is vital for building positive relationships, working in teams and engaging in Year 10 leadership roles such as Peer Academic Leaders, Peer Support Leaders and Student Orientation Guides. These roles involve introducing new members to our cohort next year and helping Year 7 take the big leap from primary to high school. We also learnt that when using our strengths poorly, we can become tired, stressed, busy, disinterested, unhappy and work long hours. However, we were given strategies on how to cope with these difficulties.

As we approach the second half of high school, we are starting to consider life after school. At the workshop, many strategies were discussed including: how to obtain a job, writing a resume, hunting job opportunities, presenting ourselves successfully and with confidence. When preparing a resume, we must consider what makes us unique as individuals. Kathryn provided us with a resume template as well

as tips on formatting and keeping our resume concise. When career planning and hunting for employment opportunities, Kathryn suggested four areas to consider in job identification: intrapersonal skills, interpersonal relationships, learning and practised skills. These skills involve becoming aware of our strengths, limitations, how we work with others, our customer service skills, taking initiative, following orders and asking questions. These are all essential components of a work environment. We learnt that how we look at people, use gestures, stand, lean, fidget and sit are all watched closely, either consciously or unconsciously when we meet people. In fact, she told us that on average, it takes about 7 seconds to form a first impression, meaning that when we speak, sit or stand we must always be presenting ourselves to the best of our ability.

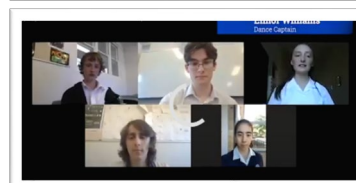
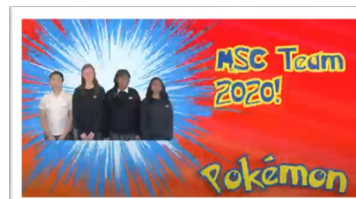
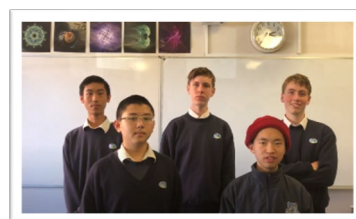
Overall, our year learnt a lot during the careers workshop, whether they were playing tetris, taking notes or coming up with weird and wondrous ice cream flavours. We want to thank our school for this opportunity to learn more about how to apply skills in Year 10 leadership roles and those required for the workforce in the future.

Claudia Hadwen and Kaia Krause (Year 9)

Game Changer

Student Report

For the Game Changer task this year, students were asked to submit an application video addressing the question *'How can we use technology to bring everyone in our community closer together?'* This provided a brilliant opportunity for some creative discussions on the nature of community in Australia, especially the importance of



strengthening ties during the pandemic. We came up with multiple solutions, including the use of video conferencing to forge supportive connections with settling refugees, an app providing basic medical training resources to rural communities, a new community noticeboard, and an innovative program to make high-tech more accessible. We are all a little disappointed as unfortunately none of us made it through to the finals, but we hope to have more success next year!

Elinor Williams (Year 10) and the 2020 Game Changer teams

Global Tiger Case Competition

Student Report

On the week of 16th September, we competed in the Global Tiger Case Competition against over 500 teams in Australia and New Zealand. We had to come up with a business strategy for the Japanese drone company ACSL, to further expand their business into the international market. Our group investigated opportunities in partnerships and expansions into the search and rescue market, and the multitudes of new implications drones could be used for with current technology.

We had a lot of fun participating in this competition and gained valuable skills. We hope to see more people from our school participating next year!

Sam Daykin, Maddie Stanley, Esther Schroeter and Liam Lehane (Year 8)

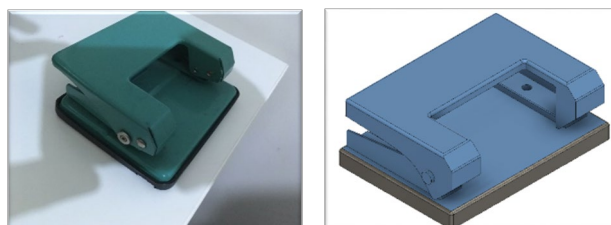
Fusion 360

Student Report

I had an opportunity to learn Fusion 360, a 3D modelling tool, in our term 2 IST assignment. 3D modelling is quite powerful on its own and in combination with a 3D-printer can help bring creations to life. While the project required only basic understanding, the assignment was so interesting that it motivated me to try different things and I want to share my story, the experience and learning.

In the beginning of the assignment, the components seemed difficult and even impossible to design. This was made even more difficult with my situation of remote learning - felt like a burden, a chore. Our IST teacher, Mr. Goykovic, provided constant support and encouragement including working with me after school hours. His belief in me, led me to learning Fusion 360 and trying various features of the tool. I made many mistakes but the more I used the tool, the more I learnt and was finally able to design all components required for the project within an hour and a half.

During all this, I fell in love with 3D design and wanted to go deeper in learning which was also identified as an opportunity in the SWOT analysis of the assignment. My dad gave me a fun little challenge to replicate a real life object in Fusion 360. We chose a hole punch at my study table for this. This pushed me beyond my boundaries and I learnt advanced skills in Fusion 360 through Fusion 360 website, associated YouTube Channels and other forums. I was able to complete the challenge within an hour! The design replicated the real life object, including the animation for the hole punch. The sense of accomplishment of going from a novice to this level of expertise was unbelievable.



Every great journey starts with a spark, and thanks to Mr Goykovic, for providing me with that spark.

Shashwat Manish (Year 9)

Debating

Student Report - Premiers Debating Rounds 1&2

Manly's Year 8 debating team has had a strong start to the season, with two consecutive wins against Mackellar and Manly B (Year 7) in the first two rounds of the competition. The Mackellar debate was 'private tutoring should be banned' with Manly as Affirmative. The debate:

Started with 1st aff. presenting a model replacing private tutoring with free, optional before school classes in 2023, as well as stating tutoring is unfair on lower SES families and takes money from families that could be spent elsewhere.

- 1st Negative rebutted these points by saying that banning tutoring is refusing education, and that it helps struggling students.
 - 2nd Affirmative rebutted and stated that tutoring can undermine teachers' jobs, confuse students and teachers, and create parental stress.
 - 2nd Negative stated that tutoring can prevent disruptive students in class, and that tutoring levels the playing field for less attentive kids
 - 3rd Affirmative provided rebuttals and a thematic, with 3rd Negative rebutting and summarising.
 - The debate was awarded to Affirmative, through winning three common themes in the debate, being fiscal effects, education effects and equality.
- The adjudicator told the affirmative team to work on staying on their side of the debate, to avoid slippery slopes and to rebut everything, including throwaway lines.

Samuel Rose (Year 8)

Corridors were decorated with spooky decorations and stalls full of snacks and candy- individually wrapped to make sure that that COVID could not get to us once again. To rekindle the Manly spirit and to motivate everyone about Halloween, there was reverse trick-or-treating as one SRC member, or (add dramatism and announcer voice) COVID CAPTAIN for each year handed out lollies to their year group. Despite not being able to carry out any of the activities we had hoped to do, we still were able to have a photo booth, and we know that many of the students enjoyed and took photos with their friends. Frightfest, we can all agree that both the SRC and the student body desperately needed after a long and tedious year of dealing with COVID and the other curveballs that 2020 brought with it.

Melissa Soe (Year 11)



Frightfest

Student Report

Ranging from princesses, eshays and pirates, as well as a whole lot more, COVID 19 could not ever stop students from dressing up and experiencing Frightfest. This new event was to combat the challenges that COVID 19 laid out for the SRC and finally brought students the activities and stalls and fun that Pinestock brought us annually.

ONLINE

TRIVIA Night

for NBSC MANLY CAMPUS

SATURDAY 7TH NOVEMBER

Get your tickets at www.trybooking.com/659159

Webinar

Technology, Gaming and Online Safety – Parent Webinar

Tuesday 6 October
7:30 - 8:30pm (via Zoom)

Learn strategies to supporting your child's healthy relationship with technology and hear from leading Child & Adolescent Psychologist Dr. Michael Carr-Gregg, Game Aware Founder Andrew Kinch, and ySafe Executive Director Yasmin London at this free online webinar. Moderated by local Psychotherapist & Lifeline Trainer Mike Burns, this panel based webinar will cover some important issues parents are facing in our COVID world as young people are required to utilise technology and the internet in education, recreation and their personal lives.

Register at

<https://bit.ly/KALOFtech>

KALOF

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WEBINAR

**TECHNOLOGY,
GAMING &
ONLINE SAFETY**

Tue 6 Oct, 7.30 – 8.30pm

Hear from
Dr. Michael Carr-Gregg, Child & Adolescent Psychologist,
Andrew Kinch, Founder of Game Aware
and Yasmin London, Executive Director of ySafe

Learn strategies to support your child's healthy
relationship with technology and online participation.

For parents, carers and
youth professionals

Free (limited spaces)
Register at KALOF.com.au

Enquiries 8495 6615 or
youth@northernbeaches.nsw.gov.au

northern beaches council GAME AWARE ySafe

Duke of Edinburgh Update

Duke of Edinburgh International Award

In a challenging year Duke of Edinburgh students are continuing to make significant progress across sections of their Award both in a virtual environment and in the community as restrictions ease.

We are impressed by Manly Campus participants who have adapted well to overcome community restrictions and engage in wholistic activities such as *Zooniverse*, a “people-powered research activity through virtual volunteering”, online yoga and fitness workouts, refining their cooking skills in the kitchen. Others are supporting their community by shopping for the aged, walking the neighbour’s dog, volunteering in a swim program for people with a disability, and cleaning up parks and beaches.

Due to COVID restrictions remaining Bronze hikes have been cancelled until further information is released by the Department. We are working through solutions with our expedition providers and hope to have these available by term 4. Fortunately, National Office of the Award program have modified hike requirements due to COVID restrictions and are allowing Bronze participants to complete one 3-day hike in 2020. Gold participants will be notified of an alternative hike program early in Term 4.

Congratulations to the following students who have recently completed the Bronze Duke of Edinburgh Award;

Leo Gottardi
Luke Irwin
Jack Slade
David Tulk
Jasper Vajdic
Tyler Valentine
Sarah Gatherer
Andrew de Montfort
Jay Lakhana
Aimee Wallace
David Zhan
Jasper Straetemans
Srestha Roy
Matthew Lim
Kenneth Lamb
Rebecca Hoffman
Lachlan Farquhar
Max De Vries
Nathan Colyer
Daniel Huang
Raja Ganeshraj
Daniel Callister
Josephine Lo

Bennett Chan
Tomas Jonmundson
Abbey McAllan
Amy Milford
Leah Pan
Aidan Perry
Joshua Roberts-Coles
Kai Turner
Jerry Yan
Tasman Parnell
Gloria Thomas

Congratulations to the following students who have recently completed the Silver Duke of Edinburgh Award;

Kieren Dyke
Nina Gozdanova
Oonagh O’Dwyer
Thomas Hawkeswood
Thilara De Mel
Jason Ho
Sonakshi Sharda
Daniel Smith
Daniel Shi

A reminder the Duke of Edinburgh program is offered to NBSC students from Year 9 and above.

Information Nights for 2021 will be held in Week 3 Term 1 at Freshwater Senior Campus. For more information refer to the *College opportunities* tab on the NBSC website:
<https://nbsc.schools.nsw.gov.au/>

Ms. Busse

Duke of Edinburgh Award
Coordinator for Northern Beaches
Secondary College

Term 4 Calendar

12/10/2020	First day of Term 4 for students
20/10/2020 - 11/11/2020	HSC Examinations

The school calendar is on the home page of the [NBSC Manly Campus Website](#), as well as the [events section](#), where you can click on *remind me* to add the event to your calendar. Please check the dates closer to the event.

Second Hand Uniforms

The second hand uniform shop would like to request donations of good quality second hand uniforms. Smaller sizes are particularly needed.

Any donations can be brought to school via your child and dropped at the front office.

Many thanks

SECOND HAND UNIFORMS

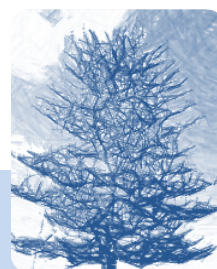
Due to COVID -19 restrictions the uniform shop will be closed for on-site purchasing until further notice.

All orders can placed by email to [Marg Martin](#) or [Fiona Cahill](#)

Please contact coordinators Marg Martin or Fiona Cahill if you would like to place an order
margaret.martin@optusnet.com.au
fiona.cahill4@gmail.com

Donations of washed good quality uniforms are most welcome and can be left at the school office. Proceeds go to the P&C for school improvement projects.

For second hand band blazers (buy & sell) contact Sarah Cole: sarahcole24@gmail.com



*The next edition of The Weekly Pines will be published on
Friday 16 October*

COME AND TRY SOFTBALL WITH US

REGISTRATIONS ARE NOW OPEN!



Looking for a friendly summer team sport with an emphasis on building skills, confidence, and having fun?

Come and join other high school students from all over the Northern Beaches playing for Peninsula Softball Club in the

Manly-Warringah Softball Association summer competition. We have divisions to suit all playing

abilities and always welcome new players. There are also opportunities to help coach

younger players and develop umpiring skills.

The season starts on October 17 and all games are at Abbott Road in Curl Curl on Saturday mornings.

For more information and to register, see:

www.peninsulasoftball.com.au
peninsulasoftballclub@gmail.com