

In 2016, MacKillop transformed the Information Resource Centre on the Isabella Campus into a Learning Commons. After an extensive refurbishment at the start of 2017, the Learning Commons has flourished. Now, not only is there a plan to evolve the highly successful concept to the junior campus, but other schools are looking to copy MacKillop's Learning Commons model. We'd rather they didn't.



MACTALKS

Each Tuesday at lunch, students from the Isabella Campus gathered in the mentoring room in the Learning Commons Library to discuss important issues affecting young people. Hot topics open for discussion this semester were: the legalisation of marijuana, marriage equality, fads and fashions, and animal cruelty. While everyone remains respectful of opposing opinions, we had some pretty heated debates within the group – a great way to pursue a passion for debating and discussing in a safe, friendly environment.

THE NEW LEARNING COMMONS

IN NOVEMBER, Mr Lee took a call from the BSSS. MacKillop's AST results were looking pretty good. While the AST's impact on our Year 12 results remained to be seen, there was one major contributing factor to the improvement of MacKillop's score: preparedness.

This Year 12 group had more help at their disposal than ever before – a teacher stationed in the Learning Commons four days per week, specialist staff in subjects like Science and Mathematics available for one-on-one help, and, just as importantly, a newly-refurbished area that was conducive to learning in teams or privately.

The refurbishments included a new mentoring and presentation room, a silent and private study area, easier access to adjoining classrooms and IT Support, and new modular furniture for breaking into groups.

Throughout 2017, the Learning Commons Library was an exciting hub of learning, with students having the opportunity to participate in MacTechies, MakerSpace, MacTalks, LitSociety, Book Week, Book Reader activities, and competitions. Many students also took part in ANU's schools enrichment program, where professors from the ANU gave our students an opportunity to experience hands on, expert learning on topics such as Astrophysics, Robotics, Engineering and Graphic design.

At the time of the AST in September, the Learning Commons model was just over a year old and had already had a positive impact on the Class of 2017. This success has led the College to turn the Wanniasa Campus Library to a Learning Commons as well, with the idea that the Learning Commons teacher at Wanniasa will have knowledge of teaching and learning in a variety of faculty areas. They will promote physical and digital resources, literacy and reading, media and information literacy, inquiry-based learning, technology integration, and digital citizenship and ethical behaviours. They will support students on an alternative education plan such as the SPATEP Program, Gradual Return to School Programs and Project Based Learning students.

Hopefully, the flow on effect from the junior years will lead to even better results in the senior years at MacKillop.



CURRICULUM NEWS



LACHLAN MCNICOL RECEIVES ACEL AWARD

THE COLLEGE congratulates Mr Lachlan McNicol, Wanniasa Campus Head (Acting), who received an Excellence in Education Award from the Australian Council of Educational Leaders. The award, presented on Wednesday 15 November at the ACEL ACT Awards Evening, recognises leaders in education around Australia who demonstrate capacity to an excellent standard, who mentor and nurture emerging leaders, and who make contributions to the progress of excellence in education.



RECOGNITION OF EXCELLENCE AWARDS

CONGRATULATIONS to Louise Davidson, Di Lovekin, Trevor Fritzlaff, and Bernie Sullivan, members of our community who received awards at the Catholic Education Recognition of Excellence Mass and Dinner in March. Teachers Joel Coates and Hannah Baillie were also inducted at the Mass, which was held at the Cathedral in Manuka. MacKillop hosted the dinner at Café Bella, with a range of students providing the meal, music, light and sound, and ushering guests through the campus.

CURRICULUM NEWS



NEW COURSES PLANNED FOR 2018

NEW COURSES have been written for 2018. On the Senior Campus students will have the opportunity to study Engineering, Global Studies, Oceanography and units in Cosmetic and Forensic Science. Sculpture and Drawing, Kitchen Garden, Geopolitics, Creative Textiles, Drama Technical and Radios and Radioastronomy are new units offered at Wanniasa Campus. The new Year 8 Digital Technologies course has proved very popular with staff and students.



CANVAS REPLACES STUDYWIZ

THE COLLEGE'S NEW digital learning platform, Canvas, replaced StudyWiz in 2017. Canvas has promoted greater communication between teachers, students, and parents and more effective and timely feedback on assessment tasks. The College has also brought in other online resources, such as LibGuide, which are linked through Canvas.

CURRICULUM NEWS



STAFF AT MACKILLOP

CURRICULUM REPORT

The Academic Focus for 2017 was around feedback. A Teacher Quality Institute Accredited Twilight Professional Learning session, run by the College, refreshed our understanding of what makes effective feedback and introduced staff to new practice and research. The Effective Feedback workshop included information on feedback research and available resources, and included workshop activities run by various staff members to support reflection and planning. Many thanks to Nicola McLennan and Lyndall Baker, Eugene Lehmensich and Trent Wilson, Bronwyn Griffin and Kathleen Galvin, Berenice Sidorko and Sandhya Tulpule, Beth Bright and Frankie Sargeant, Isabelle Enusque and Donna Anderson and Sandy Duncan for sharing their insights and practice. All faculties have now developed plans to incorporate effective feedback, both formative and summative, into their practice.

Many exciting professional learning opportunities were offered by College staff throughout the year. Titles of workshops included Language Disorders and Autism, Curriculum Design and Feedback, Mindfulness in the Classroom, Green Technology in the Classroom and The Fundamentals of Google. Rebecca Jones also ran a workshop about using student perception data to reflect on and improve practice at the TQI Teacher Mentoring Mini Conference. Judith Gazy also presented again at the English Teacher's Conference in Hobart.

This year the College introduced progress reports as part of the assessment and reporting cycle. This report is issued prior to the parent/teacher interviews each semester and provides information about tasks completed to date and the student's approach to learning. Parents/carers have reported that the progress reports helped inform their discussions with teachers during P/T meetings. This affirms the importance of providing effective feedback on a range of skills and achievements over each assessment period. The response from parents has been overwhelmingly positive. We are also trialling publishing progress reports and end of semester reports electronically.

The College has taken part in two NAPLAN Online Trials in 2017. The purpose of the trials was to evaluate potential test items for inclusion in future online NAPLAN tests and to determine the school's capacity to deliver these tests online. ACARA, the organisation responsible for administering NAPLAN hopes that from 2018 some jurisdictions, including the ACT, will conduct NAPLAN testing online. As a College we have prepared staff, students and technical support if this occurs.

In September, the College received commendation from the Board of Senior Secondary Studies for being the College with the highest number of teacher identified quality tasks for two moderation days running. This means that senior teachers across the ACT have rated our tasks to be of the highest quality across a range of subject areas. An achievement indeed!

claire fletcher + maria o'donnell

Assistant Principals, Curriculum (Acting)

OUR WORLD



LETTER/OPINION

THE POWER OF A GOOD EDUCATION

Our Principal, Mr Michael Lee, looks at some of the bigger issues that had us talking throughout 2017 and how those discussions can be informed by critical thinking and a good education.

SEVERAL NEWS ITEMS have given us much to ponder over the course of the year. The possible influence of Russia on the US Presidential Election last year, the tearing down of Confederate monuments and statues in the southern states of the US and the subsequent vandalism of colonial statues here in Australia, as well as the Australian Marriage Law Postal Ballot (same-sex plebiscite) have raised many more questions than perhaps they have provided answers.

Issues such as the citizenship of our Federal parliamentarians, coal versus renewables, and the iniquities of the Gonski 2.0 funding model have not been without their controversies or indeed consequences either.

In the highly-charged political landscape of these issues, many of us have found ourselves at odds with others or in the uncomfortable place of sitting on the uncomfortable fence. It is my view that a good education in a good school is as necessary now as it has ever been. The opportunity to think critically, to develop and refine our opinions based on research and an ordered arrangement of facts, to listen respectfully, and to voice our opinions with confidence, clarity, and with a sense of audience and purpose are central to a good schooling.

There is a growing body of the opinion that the Putin regime used money and ICT to heavily influence the outcome of the 2016 US Election. Marshalling financial and propaganda resources to play at deeply held beliefs, impressions, and fears will only be effective if there is a failure to apply fundamental critical skills to what we read, hear and watch.

The dangers of technological communication are clearly showcased with this issue. False (fake) news items, hacking news services, and the strategic circulation of advertising and opinion pieces conveying quite false information is the new threat to democracy – if we fail in our duty to provide an education.

Fundamental critical literacy applies. Adolescents are taught to read, listen, and watch with the following questions in mind:

- Who is the author of this?
- Who paid for this?
- What is the author's purpose?
- Is there a dual purpose?
- How does the language, layout, tone, and voice serve that purpose and what impact does it have on the audience?
- Where is it published?
- What evidence is there that the point of

view is informed (evidence of research, sourcing, use and arrangements of facts)?

When information is scrutinised against a critical framework, we become far more informed, confident, and adept citizens.

The tearing down of statues and monuments serves a variety of purposes; at its best to right a wrong and to deny agents of subversion a rallying point (eg the destruction of Nazi symbols and monuments) or its most dangerous to appropriate or rewrite history or to hijack, distort, or deny history.

"THERE ARE GOOD AND DECENT PEOPLE ON ALL SIDES OF THIS DEBATE."

The attacks on monuments to Captain Cook and Arthur Phillip have posed some uncomfortable questions for Australians. Indigenous Australians, their presence and contribution to this land for many millennia, would be within their rights to view the arrival of the tall ships and all that followed in a very different light to those of us of European heritage. The impact of Cook and Phillip, and the choice of January 26 as Australia Day, are at the heart of contested history, pride in heritage and identity, and of a yet to be reconciled past for many Australians.

The politics of the relative merits of the same-sex marriage plebiscite itself belong to another discussion but many who adhere to the Catholic Church have found ourselves in the interesting and not very comfortable space of loving and being loyal to a Church that, in its myriad of teachings holds to the traditional view of marriage whilst many of those adherents, to varying degrees, are favourably disposed to the Gospel Values of love, compassion, justice, and respect.

At times it seemed that the two standpoints were mutually exclusive and that to follow one's conscience was, for some, to put themselves at odds with a love for humankind. This is not how it should have been!

A politician, whose name I can't recall, stated on ABC Radio National (perhaps some of you have heard of it) that there are good and decent people on all sides of this debate.

As comforting as I found this observation, regrettably, not all in this debate were good and decent.

The world of social media, an increasingly under-resourced mainstream media pursuing

cheap, distorted headlines, and the promotion of differing and unrelated agendas through skilful advertising at times blurred the voice of the sincere dissenter, the fair question, and the shrill bigot to help place a complex and emotional issue of real passion into an environment of fear, distress, hurt, and discomfort.

And so, in a pluralistic world of increasing transience of ideas and beliefs, where old paradigms are now contested ideas and where an opinion or idea spewed onto social media is apparently as newsworthy and valid as a thoughtful, reasoned and informed argument, what are we to rely on to navigate us towards truth and certainty?

Clear values that promote a worthy life and the Common Good will provide a framework to help each of us to discern and evaluate what we see, hear, and read. At MacKillop, we name such values as Gospel; faith, hope, and love. Our school aspires to be clear about what we stand for and to give our students a contemporary language that equips and empowers them to convey those values to each other.

We aspire to provide a curriculum that gives our students not only knowledge but also ideas, possibilities, vision, and an enthusiasm for learning. Indeed, a curriculum that promotes inquiry, research, critical thinking, collaborative problem solving, and a recognition that inclusion and diversity is good. It will, however, sometimes mean that we may find ourselves listening to an informed point of view with which we completely disagree.

The College will celebrate 20 years as MacKillop in 2018. Our celebrations will be enthusiastic, fairly modest, and completely sincere. We have much to be thankful for. If we can honour the faith and tradition to which we belong, continue to build a community that welcomes everybody and give our students teachers who promote rigorous inquiry, trust, and paths to understanding, then we will navigate a certain, worthwhile future with confidence, purpose and wisdom.

"I have come that you might have life, and have it to the full." (John 10:10)

With this comfort, let us place ourselves in God's providence.

michael lee
College Principal

WORLD NEWS



THE INAUGURATION OF DONALD TRUMP

The inauguration of Donald Trump as President of the United States took place on 20 January this year, but it was a worldwide event the following day that stole the headlines. Millions of people worldwide joined the Women’s March in response to the inauguration. Some 420 marches were reported in the US and 168 in other countries, which made it the largest single-day worldwide protest in recent history. The Women’s March was held largely due to statements that Trump had made, and positions that he had taken, which were regarded by many as anti-women or otherwise offensive.

Image of Donald Trump by Avatars.design.
(<http://avatars.design>).



THE AUSTRALIAN MARRIAGE LAW POSTAL SURVEY

This was a national survey that aimed to gauge support for legalising same-sex marriage. The survey was held via the postal service between 12 September and 7 November 2017, but, unlike electoral voting, responding to the survey was voluntary.

A survey form, instructions, and a reply-paid envelope were mailed out by the Australian Bureau of Statistics to every person on the federal electoral roll, asking the question “*Should the law be changed to allow same-sex couples to marry?*” The topic was hotly debated until the voting closed, with some even resorting to violence to push their cause.

At the end of the day, Australia voted “YES”, meaning that the government will facilitate the introduction of a private member’s bill to legalise same-sex marriage in Australia.



A WORLD DIVIDED

The international scene was full of tension in 2017. North Korea’s testing of ballistic missiles across the Sea of Japan created tension with neighbours Russia and China and its long-time foe, the US. Australia was not immune, with Pyongyang saying that Australia would “not be able to avoid disaster” if it continued to work with the US. As a result, the UN unanimously approved sanctions on North Korean trade and investment. This didn’t stop North Korea, which only upped its testing of nuclear warheads.

Conflict in the Middle East continued, with an alliance of Syrian Kurdish and Arab fighters, backed by the US, taking back the city of Raqqa, which had been the headquarters of the Islamic State for the past three years. As part of the conflict against ISIS, the US dropped the world’s largest non-nuclear weapon on a base in Afghanistan. Unfortunately, it doesn’t look like fighting will end any time soon.



PARLIAMENT AND DUAL CITIZENSHIP

In 2017, the eligibility of certain Australian parliamentarians to sit in the Parliament of Australia was called into question because of their actual or possible dual citizenship. The issue came from section 44 of the Constitution of Australia, which prohibits members of either House of the Parliament from having allegiance to a foreign power. On that basis, the High Court of Australia had previously held that someone who holds dual citizenship is ineligible for election to either House. Seven cases of politicians claiming that they had not been aware of holding dual citizenship before they were elected were referred to the High Court of Australia, including Deputy Prime Minister Barnaby Joyce.

After the High Court ruled on the eligibility of the politicians, the Coalition lost its majority when Liberal MP John Alexander resigned for holding British citizenship. While the government did not fall (at the time of writing, at least), it caused an interesting situation for the House of Representatives.



TERRORISM REARED ITS UGLY HEAD

There are many cases of terrorism that occur across the globe each year, but it was May’s terrorist bombing attack at an Ariana Grande concert in Manchester, England that caught our attention – not only due to our links with Britain, but also due to Grande’s appeal among today’s youth. The attack killed 23 people and injured over 500, and occurred just two months after a vehicle-ramming attack in Westminster, London. In October, a truck bombing in Mogadishu, Somalia, killed over 350.

Although not related to a terrorist organisation, October’s mass shooting in Las Vegas reignited the ongoing debate about America’s gun laws. The offender opened fire on a crowd of concertgoers along the Las Vegas Strip, leaving 58 people dead and 546 injured, before turning his weapon on himself. The incident was the most prolific mass shooting committed by an individual in the United States.



HURRICANES, HUMANITARIAN CRISIS, AND HOLLYWOOD

Sadly, a number of natural disasters led to death and destruction throughout 2017. Hurricane Harvey hit the United States in August, causing catastrophic damage to Houston, before Hurricane Irma – the strongest hurricane ever recorded in the Atlantic basin – hit the Caribbean and Gulf of Mexico, followed by Hurricane Maria. A magnitude 7.1 earthquake also hit Mexico, killing 370 and leaving thousands homeless.

As well as this, the UN warned that the world was facing the biggest humanitarian crisis since WWII, with up to 20 million people at risk of starvation/famine in Africa and the Middle East.

News out of Hollywood had a much more serious tone to it than usual when Harvey Weinstein, a prominent American film producer, was accused of sexual assault by dozens of women in the film industry. The reporting of these substantial claims encouraged others to come forward, with allegations stacking up against some of Hollywood’s most-admired stars.

POP CULTURE



MUSIC

OUR TOP TEN TRACKS OF 2017



1. Despacito
Luis Fonsi ft. Daddy Yankee



2. Believer
Imagine Dragons



3. Glorious
Macklemore ft. Skylar Grey



4. Body Like a Back Road
Sam Hunt



5. 1-800-273-8255
Logic ft. Alessia Cara & Khalid



6. HUMBLE.
Kendrick Lamar



7. Young, Dumb and Broke
Khalid



8. Thunder
Imagine Dragons



9. Shape of You
Ed Sheeran



10. Rockstar
Post Malone ft. 21 Savage

YOU DON'T SAY? Pop music is the most popular genre of music with students at MacKillop.



MOVIES

OUR TOP FLICKS OF 2017



1. Wonder Woman



2. Baby Driver



3. Beauty and the Beast



4. Guardians of the Galaxy Vol 2



5. It



6. Spider-Man: Homecoming



7. Dunkirk



8. Thor: Ragnarok

Despite some of the movies in the list below, 'Comedy' has been voted by students to be their favourite genre.



TELEVISION

SHOWS WE'VE WATCHED IN 2017 - OLD AND NEW



1. Game of Thrones



2. Rick and Morty



3. Pretty Little Liars



4. Brooklyn Nine-Nine



5. Riverdale



6. Simpsons



7. Gossip Girl



8. Friends



9. How I Met Your Mother



10. Shameless



TRENDS

SOCIAL TRENDS OF THE YEAR

SOCIAL MEDIA

Instagram (88%) is again the most popular form of social media among our students after overtaking last year's favourite, Snapchat (86%). The number of facebook users continues to fall.

STREAMING

We're now at 84% of students who stream their television content - that's up by 11% on last year. Netflix is by far the most popular streaming site among students.

FIDGET SPINNERS

Fidget spinners have actually been around for years, but the toys quickly took over every kind of retail establishment in 2017. We're already seeing fewer spinners around. Perhaps the fad is over?

FAKE NEWS

Our trust in the media is fading, with biased reporting and modern-day propaganda. With any luck, credible journalism will find its feet again. Until then, critical thinking is necessary.

FASHION TRENDS

Torn jeans took it a little too far, contouring (makeup) became common knowledge, loose clothing was in, and pink was the colour of choice.

CRYPTO CURRENCY

Bitcoin's price skyrocketed in 2017, prompting staff and students alike to venture into the world of crypto. Will it replace traditional currency in the future? Time will tell.

INTEGRATED HUMANITIES



INTEGRATED HUMANITIES



TERM 3: ROMANS AND REBELS

In Term 3, half of Year 7 did Romans and Rebels as our unit in I-Hum. We learnt about Jesus' life and how the Romans treated him and his followers. We watched the documentary *Son of God*, which examines Jesus' life from a factual perspective and pieces together what we know about Jesus from the Gospels with other evidence to find out what Jesus' life and death were like. It was very interesting to find out how Jesus and other people lived during this time period in the Roman Empire.

It was interesting learning about how similar the wealthy Romans' lives were to ours, from education to the food. They even had a working toilet system, roads, an empire-wide currency in coins, jobs and so much more. We loved this unit and look forward to continue doing History in SOSE next year.

matisse winfield, stella giannis + erin hartcher
7F1

I-HUM an integrated approach to learning about our world

I-HUM REFLECTIONS

TRANSITIONING TO HIGH SCHOOL

When we all first came to MacKillop, I-Hum really helped us adjust to the transition from primary school into high school. Instead of going to three different classes we only had to go to one.

In Term 1, we learnt all about water and all the things it can do. In the Religion component we learnt about Mary MacKillop and how she improved education in Australia. Our class novel was *Boy Overboard*. What a load of FUN!

ebony brunt + olivia talerich
7F2



FUN ACTIVITIES

In I-Hum this year, we have done lots of fun activities and learnt many new things. My teachers have been very supportive and trustworthy. I have made lots of new friends in my I-Hum class.

kayla spagnolo
7W1



ASSIGNMENTS IN I-HUM

Throughout the year, we have completed a range of different I-Hum assignments. Many of these tasks have been engaging and enjoyable to do. We even had the chance to build and design our own sustainable town!

chloe ball
7A1

EXCURSION TO THE LAKE

In Term 2, we went on an excursion to Lake Tuggeranong. We looked at the waterways and how water is filtered through storm water drains before entering the lake. After that we had lunch at Maccas and KFC!

zachary hellwig
7A1

SHORT STORIES

Turn to our **Language and Literature** Section (pages 104-113) to check out some of the 50-word short stories our Year 7s created in I-Hum!

STUDIES OF SOCIETY



SOSE

studies of society + environment



MODERN HISTORY TRIP

Mr Cheadle's Year 12 Modern History class visited the Jewish Museum in Sydney on 31 March. Welcomed warmly by the museum volunteers, the overwhelming sense of purpose and dignity carried by those who had contributed and continued to contribute to the institution's overall atmosphere quickly became apparent to us. We spent the morning with a museum educator with whom we discussed the link between history and memory and studied the complex and tragic relationship between the rise of Nazism and the destruction of two thousand years of European Jewish life. The interactive presentation consisted of intriguing yet undeniably unsettling photographs and a collection of stories that further revealed to us the devastating nature of the Holocaust and the Jewish population's subjugation by the Nazis.

We were then treated to a brief tour of the museum, where we examined a number of fascinating artefacts and displays relevant to our course, exploring key aspects of the period such as the implementation of the Nuremberg Laws, the breakdown of democratic structures, the role of propaganda and the experience of Kristallnacht. We readily accepted the challenge of absorbing as much as we could within the constraints of a limited time frame, and we were privileged enough to witness the first-hand testimony of a Holocaust survivor, an experience which humanised the consequences of the Nazi regime and the ways in which it impacted those who were targeted.

sydney sakman

Year 12 Student



FINANCE PROGRAM

With only 15 places offered for the Department of Finance Graduate Program from over 2000 applicants, MacKillop has performed remarkably well. Five MacKillop applicants were successful in gaining a place in the program: Ismail Hammoud and Bailey Dark from the Class of 2015, and Angela Sullivan, Riley DeVoy, and Elizabeth Batten from the Class of 2016.

michael batten

SOSE Coordinator

ECONOMICS TRIP



During week 5 of Semester 2, Mr Batten led an exciting expedition around the diverse city of Melbourne. The trip included visits to the Queen Victoria Markets; the 'Big Issue' headquarters, where we uncovered the truth surrounding the serious issue of poverty in Melbourne; and the backstreets of Melbourne's CBD, where the students learnt the secrets of Melbourne. At night on the first day, the small group of six retired to the Space Hotel where they, along with the hospitality and art students, would spend the next 2 nights.

The next day began with a tour of Richmond, before lunch at Charcoal Lane, a social enterprise that focuses on alleviating the disadvantage felt by young Aboriginal peoples. Dinner was served at Lentils Is Anything, where an all vegan menu, an absence of price tags and the wholehearted staff opened the students' eyes to the importance of giving.

The final day ended with our exhausted, but enlightened, group exploring the city as we saw fit before flying home that evening. Despite all of the amazing experiences that we had and touching things that we saw, the highlight of this trip was a group selfie with the notorious Mr Batten - whom we thank very much and are endlessly grateful for.

nikala speed

Year 12 Student



SOSE NEWS



LAW SCHOLARSHIP

Year 12 legal studies student Ingrid Francis was one of six ACT College students shortlisted for the Snedden Hall & Gallop University Scholarship for 2017.

On 11 October 2017, Ingrid presented in the Moot Court of the University of Canberra on the topic of "Copyright in the digital age". The judges noted that they were struck by the high standard set by Ingrid and the other applicants.

Although Ingrid was not successful in achieving the scholarship, we congratulate her on being one of the finalists and wish her the very best as she aims to pursue Law at university.

peter johnson

SOSE Teacher



ANCIENT HISTORY

On 19 October a group of very excited students from Year 11 and 12 studying either Geography or Ancient History, travelled up to Sydney. After a lengthy bus ride, students parted ways, with those studying Ancient History travelling to Macquarie University to visit their Classics Museum and hear from Egyptologist Dr. Eve Guerry. In addition to hearing about her fascinating work on the continuing archaeological excavations in Thebes, Egypt, students had first-hand experience investigating and handling many ancient artefacts on display in the museum; analysing their origin, purpose and usefulness. Overall, it was a highly enjoyable day and rewarding for both students and teachers alike.

tara williams

SOSE Teacher

STUDIES OF SOCIETY



SOSE IN ACTION



BIRRIGAI EXCURSION

Some Year 7 Defence students joined other Defence students from schools around Canberra to participate in team building activities at Birrigai. Students participated in the Giant Swing, Flying Fox and a Team Rescue obstacle course. The Year 7 MacKillop students confidently asserted their opinions, carefully listened to others and acknowledged where they could have improved their teamwork skills during debriefs.

DEFENCE PROGRAM



ANZAC DAY IN COOMA

There was a real sense of community in Cooma on ANZAC Day. As is tradition, current MacKillop students from the region marched with students from St Patrick's Parish School, Cooma, to represent the College and honour the relationship between the schools. The service highlighted the importance of community and featured the active service of men and women from the area.



DEFENCE COMMUNITY DAY

On Tuesday 31 October, the MacKillop Defence community, students, parents and staff, gathered together to celebrate the end of the year. Notably, the community were able to hear from Captain Jan Noonan, who, in her 30 years of Defence experience, had some enthralling stories to share. There was a great buzz in the afternoon as senior Defence students led various activities, some quite competitive! It was a great day to celebrate our achievements this year and look forward to everything to come in 2018.

THE PROGRAM

MacKillop has a rich Defence program, in which students from Australian Defence Force families have contributed in a variety of ways. Students have been challenged physically during excursions, represented the College admirably at commemoration ceremonies and participated in one-on-one meetings to achieve their academic goals. We have also had opportunities to meet more casually at campus morning teas. The events on this page are a snapshot of what the MacKillop Defence community experienced this year:

Desiree Disanayake

Defence Transition Mentor



BATTLE FOR AUSTRALIA

Four Year 9 students represented the College at the *Battle for Australia* commemoration ceremony at the Australian War Memorial, joining students from other schools, Australian veterans and members of Parliament. Notably, the students played an integral role at the beginning of the ceremony participating in making a wattle wreath.



DO WHAT YOU LOVE BREAKFAST

The *Do What You Love* breakfast forum was an opportunity for female senior students to interact with serving women in the Australian Defence Force. The forum featured three guest speakers who shared their insights and experiences that the ADF has offered them, highlighting themes of opportunity, friendship, leadership and mentoring. It was a wonderful event, full of inspiring women and the students benefitted greatly from the event.

LONG TAN AWARD

The Australian Defence Force (ADF) Long Tan Youth Leadership and Teamwork Awards recognise students who demonstrate leadership and teamwork within both the school and the broader community, and who display strong values, such as doing one's best, respect for others and "mateship". This year, at our special assembly, Brianna Ambrosino (Year 10) and Jack Adamson (Year 12) received the Long Tan Award, while Lauren Frost (Year 12) was presented with the ADFA Education Award. Congratulations to these students.



NATIONAL COUNCIL OF WOMEN AUSTRALIA

On Wednesday 14 June, Maddison Coles, Ellen Scott, Caitlyn Williams and Julia Del Bianco went to a leadership workshop, run by the President of the National Council of Women Australia (NCWA), Barbara Baikie. This workshop included a presentation by Frances Crimmins where students learnt how to be better leaders, learnt how to better communicate and use social media to our advantage from Genevieve Jacobs, and had a crash-course in how to be assertive from Zoe Routh.

The following morning, the students were joined by Gabby Milgate, Danielle Coles, Amy Scott and French exchange student, Mathilde Fel, at Parliament House for the official launch of the National Council of Young Women Australia. This featured a breakfast and guest speakers as well as a visit to meet PM Malcolm Turnbull.



GRIP LEADERSHIP CONFERENCE

On Monday 6 March the Wanniasa SRC team went to the Australian Institute of Sport to participate in the GRIP leadership conference. Students were taught about the fundamentals of leadership, along with other skills, such as overcoming challenges, getting projects off the ground and making them effective and a variety of other, useful skills.



LEADERSHIP

STUDENTS CREATE PROGRAM TO EMPOWER YOUNG WOMEN

Congratulations to Ellen Scott and Caitlyn Williams (Year 9), the creators of SisterACT, a program designed to empower and support young women that has been rewarded with the Audrey Fagan Young Women's Enrichment Grant.

The aim of the project is to create groups within Canberra schools, supported by an online forum, to ask questions and discuss issues they find important.

The idea started with the girls' involvement in the National Council of Young Women Australia, and will initially take place at three schools in Canberra, including MacKillop. So that the program can get off the ground, a number of girls at the College will attend external workshops in leadership, advocacy, and communication.

We at MacKillop are excited to see the development of the program in 2018. Congratulations, Ellen and Caitlyn!



LEADERSHIP AND WELLBEING

YOUTH HEALTH EXPO

The hugely successful Youth Health Expo of 2016 made its triumphant return on Wednesday 16 August 2017 with a brand new theme of 'Safe Partying'. It was comprised of three rotation sessions - an expo, an expert panel and a PC challenge. With over 10 organisations attending the expo in the gym, students were exposed to a wide variety of information and sources to ensure their safety in social, community, personal and party environments. The panel consisted of six former MacKillop students from the class of 2015 who gave the senior campus their hot tips and tricks about managing College life and



+ WELLBEING

ways that they stay safe while partying. The PC challenge introduced students to the 'Take Kare Safe Space' initiative that helps people stay safe when out in Civic and challenged them to come up with their own initiatives. This activity challenged students to think about staying safe and helping others and motivated them with the illustrious prize of a \$400 gym membership to Club Lime. The Year 11 SRC would like to thank Mr Durham for his support and assistance in their organising of the event as well as everyone who attended and made the expo such a success.

sarah purcell
Year 11 SRC



STRESS LESS WEEK

As senior students ourselves we understand the stress that students go through when faced with exams. We created Stress Less Week in the lead up to the Senior Semester 1 Exams and during Year 10 Exam Week to try and minimize stress and improve students' overall results.

During the week we held a number of activities that were aimed at alleviating stress or refocusing stressful energy into positive thoughts.

On Monday, a gratitude wall was available in the quad where students were given the opportunity to write on a banner and answer the question "What are you grateful for?" Students spent lunchtime on Tuesday listening to live music performances from some of our very talented MacKillop students - this created an amazing vibe on campus. On Wednesday, we handed out free 'stress less' wrist bands to all students that were kindly donated by Mental Health Australia. These wrist bands were distributed to remind students that sustaining a healthy mindset is vital during this stressful time. Free pancakes and hot Milo were distributed to all Isabella students on Thursday morning, to remind students to eat breakfast before their exams as this is the most important meal of the day!

lauren frost + molly philpot
Portfolio Captains

ALTITUDE DAY

On Friday 2 June, 19 Year 9 students embarked upon an empowering experience: Altitude Day 2017. The day was run by the yLead team and was designed to inspire young people to become positive leaders within their school and wider community. Matt Kershaw, CEO of yLead, shared his own journey of self discovery and unpacked the six keys to unlocking potential: live your passions; challenge yourself; recruit mentors; make a plan, take action; champion mindset; never give up.

By providing students with the tools required to focus and exercise their leadership capabilities, it is hoped that they will confidently be themselves and do great things!

beth bright
Numeracy Coordinator



ATSI EDUCATION

aboriginal and torres strait islander education



THE PROGRAM

This has been a fantastic year for Aboriginal and Torres Strait Islander Education at St Mary MacKillop College.

All Aboriginal and Torres Strait Islander students at MacKillop are offered the opportunity to attend tutoring once a week. These tutoring sessions have again been popular in 2017. We are seeing an improvement in student organisation and on-time submission of assignments.

Some of the things we have done are featured over these two pages. We look forward to a big year in 2018, particularly in regard to strengthening our relationships with other communities.

caroline winslade

Aboriginal and Torres Strait Islander Education Contact Teacher

STUDENTS ATTEND THE WORLD INDIGENOUS PEOPLE'S CONFERENCE



We had the honour of participating in the World Indigenous Conference on Education, known as WIPCE, in July this year. WIPCE is hosted by a different First Nations people every three years, and this time the Six Nations of the Grand River, the largest First Nations reserve in Canada hosted us in Toronto. These six nations are known as the Mohawk, Cayuga, Onondaga, Oneida, Seneca and Tuscarora peoples.

The Conference opened with a video message from Canada's Prime Minister, Justin Trudeau, in which he expressed the importance of the Conference in bringing together key education stakeholders to share successful-practice and promote healing. He also said that the youth are the future and he's excited by what we can achieve if we remain strong in our identities and create and embrace opportunities in whatever our passions are.

As youth, we participated in a dedicated two-day youth program as well as the main conference sessions, workshops and opening and closing ceremonies. The youth program taught us skills and knowledge for being

resilient and setting and achieving our goals. We learnt about the power of energy and language alongside up to 75 other young people from across the world.

Through workshops and conference sessions we learned about how traditional teachings were being implemented into national curricula across education sectors which had a positive impact on reconciliation, community spirit and boosting successful education outcomes. For example, a Mohawk Treaty Protocol guides students in secondary school through 'wiping tears, cleansing the ears, clearing the throat, unburdening the mind, uplifting the spirit, and strengthening the body'. By maintaining this protocol students are empowered and strengthened to take on whatever challenges come their way, with the right attitude and the right spirit.

We weren't sure what to expect but we very much enjoyed celebrating our heritage, our families and our cultures with brothers and sisters from all over the world. There were also times we were saddened to hear about similar 'stolen generation' stories that continued to hurt our generations now. A Truth and

Reconciliation movement is in place to try to heal the families affected.

From Sami people, to Maori, to Navajo, we have made new friends to stay in contact with, who experience the same kinds of things we do as minorities, and a shared hope in a co-created future. We gained a new found appreciation for the First Peoples of our own country, too. We heard stories of survival, we have new heroes to be inspired by and new elders (particularly the Six Nations chiefs) to seek wisdom from. We felt a strong sense of pride for all of our peoples there who have maintained their culture despite the adversity. It truly lived up to this year's Conference them "A Celebration of Resilience". Now to look forward to 2020, when Australia's Indigenous Training College, Tauondi will host in Adelaide!

It was a huge honour to represent our Aboriginal and Torres Strait Islanders peoples of Australia, our Canberra community and our College community, and we will always be extremely grateful for the opportunity

tyra + gabrielle peterson

ABORIGINAL AND TORRES STRAIT ISLANDER EDUCATION



NAIDOC MASS

The annual NAIDOC mass was another opportunity for the Aboriginal and Torres Strait Islander students to come together as a community. The mass was well attended by MacKillop students and they were able to reflect on their membership of a larger spiritual community. The traditional McDonalds stop on the way home was enjoyed as always.

RECONCILIATION WALK

The first major activity of the year involved the participation of Year 9 Aboriginal and Torres Strait Islander students in the Reconciliation Walk across Commonwealth Ave Bridge. The students who participated in the walk really enjoyed being part of the community and interacting with both Aboriginal and non-Aboriginal people who felt strongly about the importance of reconciliation. The BBQ at the end of the walk was legendary.



ATSI EVENTS



ABORIGINAL ART

Another activity in 2017 was the production of three large Aboriginal Artworks. Linda Huddleston from Burrunj Aboriginal Art Gallery came to MacKillop to present a painting workshop with Aboriginal and Torres Strait Islander students from Years 7 - 10. The students enjoyed listening to Linda's stories as they painted and the artwork that was produced is amazing. It is on display in the Learning Commons at Wanniasa.

GUGAN GULWAN VISIT

In Term 3, Sarah Patrick from Gudan Gulwan came to the Wanniasa Campus to provide information to students about what services the centre offers. The students were enthusiastic about strengthening the connections between Gudan Gulwan and St Mary MacKillop College and to this end a visit to the centre was planned for Term 4.



NAIDOC ASSEMBLY

This year students at the Wanniasa campus had the opportunity to present to the school at assembly as part of NAIDOC week. Lauren Russell in Year 8 opened the assembly with a special acknowledgement of country. The year 7 students, led by Lachlan Warren, practiced and then performed a welcome dance in front of the whole school. This was followed by the National Anthem, accompanied by Aboriginal Music. Kiah Noble and Takisha Brandy shared an aboriginal reflection for prayer and then Stewart Barton played guitar and sang 'From Little Things Big Things Grow'. The NAIDOC portion of the assembly was well received and we hope to be able to present at the Isabella Campus in 2018.

FOOD

food studies and hospitality

How do you make your Milo?

According to our Yearbook Survey, **20%** of students put Milo in **AFTER** they put the milk.

If that seems odd to you, you're not alone, since most students put the Milo in first (**60%**), some dissolve the milo in hot water before adding milk (7%), whilst the remaining 13% don't drink chocolate milk.

If you exclude PE (the perennial favourite), **Food and Textiles is the favourite class** among students at MacKillop. There must be something enjoyable about being able to eat in class.



2%

of MacKillop students say they want to have a career in Hospitality once they leave school. That might not seem like much, but it's actually quite a significant number (given the size of the school) of aspiring chefs.

92%
of MacKillop students eat red meat.
5% of students consume either a vegan or vegetarian diet.

\$5.50
That's the amount the average student spends at the canteen per week. The big spenders bring that average up, considering **68%** of students say they *rarely or never* go to the canteen. That means MacKillop spends **\$10,153** across the two canteens each week.

IT'S A WRAP!
The most popular item at the Isabella Campus canteen is the breakfast wrap. It's good to know that students are eating their breakfast, even if they're waiting until they arrive at school to do so.

In 2018, MacKillop is introducing a new unit, *The Kitchen Garden*, where students will grow fresh produce, which they will then use to create healthy recipes. This will be available to Year 9 students.

17%
of students at MacKillop have a food allergy or intolerance.

Café Bella put on **59** functions over the year. Most of them were for the purpose of student learning in the kitchen and front of house, while some were just for catering and entertainment purposes.

Italian food is the favourite cuisine of students at MacKillop (**36%**).

Asian (including Chinese, Japanese, and Thai) ranks next best, followed by Western cuisine (Aussie, British, American), and Mexican.

FOOD STUDIES



KATELYN, CLAIRE AND KAIN COMBINE FOR ONE LAST COOK

BY NIKALA SPEED

In our Year 12 cohort we are lucky enough to have many students who possess a variety of talents and abilities, and Claire Lonie and Katelyn Twiss are no exception. Since 2014, Claire and Katelyn have competed against teams from all over Canberra, Australia and the Pacific, picking up a number of medals (often of the gold variety) in a range of culinary competitions.

As graduating students this year, Claire and Katelyn represented the College in culinary competition for one final time, teaming up with teacher Justin Kain, who has mentored the girls since their first competition as Year 9 students. Let's look back at their decorated history:

YEAR 9 (2014)

Claire and Katelyn were joined by Amberly Elliott and Brooke Simpson for a Regional competition where they were required to prepare, cook, and present a four course meal in two hours. They received first place and a gold medal. They chose to cook a thyme marinated lamb salad, cavolo nero pesto pasta, butterscotch nashi pear pudding with toffee shards, and a nashi pear frangipani tart.

YEAR 10 (2015)

The team halved, and only Claire and Katelyn continued on with their culinary ambitions. In the regional comp the dynamic duo was required to prepare, cook and present two plates of one, very detailed dish. Here they were required to use ocean trout and show their ability to turn vegetables, precision cut, and perform four different styles of cooking. The pair competed against 10 other teams and won gold for their panko crumbed ocean trout with miso foam, lemon chilli gel and coriander caviar. The first place qualified the pair to represent Australia in Tahiti.

Our culinary masters spent a week in Tahiti. During their one-hour competition, they versed teams from across the Pacific including Japan and New Zealand. Despite being the youngest, and least experienced team, Claire and Katelyn won a bronze medal for their Tahitian Batfish and Pan Fried Shrimp with Lime & Chilli Gel, Pea Cream and Balutai Sauce.

YEAR 11 (2016)

The first year of college came around and for the Regional Competition, Claire and Katelyn were required to use spatchcock and cook it three ways, serving it with a potato galette and cauliflower puree. They won another gold medal.

YEAR 12 (2017)

This year, Katelyn and Claire decided to go out with a bang. They won a gold medal at the Regional Competition for their tea-smoked chicken breast with brussel sprout dumplings and soy caramel sauce. They served this mouth-watering dish with spiced sushi balls, pickled ginger and fried choy sum.

Premiers of the Regional Competition, Claire and Katelyn were flown to Brisbane to compete in the National Culinary Competition, against some of the best schools in Australia. They served two plates of pan fried chicken with coriander veloute and potato and leek puree. The girls finished their illustrious High School culinary career with a silver medal.



SYDNEY EXCURSION



YEAR 11 HOSPITALITY TRIP

The Year 11 Hospitality excursion to Sydney took place on 3 and 4 August. Accompanied by Karen Hundy and Janelle Maas, the students visited a range of places in Sydney to learn about hygiene, food preparation, purchasing produce, and more!

Some of the places we visited were:

- Sydney Tower Tour and Buffet Lunch
- Darling Harbour
- The Sydney Fish Markets Tour
- The Rocks Foodie Market
- Korean BBQ in Chinatown

janelle maas
Food & Textiles Coordinator

DISHES OF CAFEBELLA



Churro bowl with vanilla bean ice cream and chocolate sauce



Beef and caramelised onion sausage rolls with house made tomato sauce



Chicken Caesar salad



Vegan fried rice



Double cheeseburger with fries



Vegan cinnamon scrolls



Spaghetti with heirloom tomatoes, haloumi and gremolata



Chicken Molé with basmati rice



Chicken schnitzel burger with fries



Sous vide lamb rump with cauliflower purée, cauliflower cour crou and chocolate gel



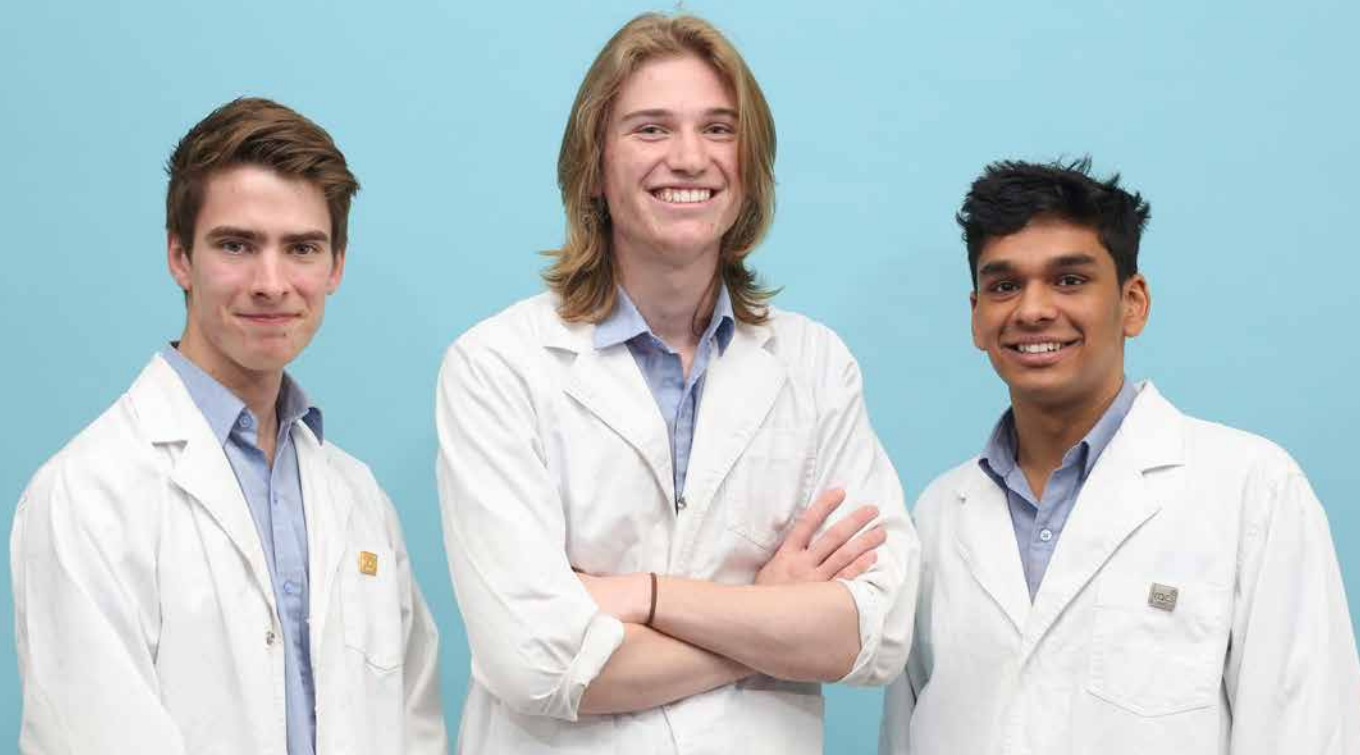
Piri Piri calamari with Asian salad and chilli oil



Tropical Eton Mess



SCIENCE *and* TECHNOLOGY



GOOD CHEMISTRY *student gets gold in national finals*

CONGRATULATIONS to the MacKillop Titration team of Anooj Lad (Captain), James Maas and Ryan Walls, who each took home medals from the Royal Australian Chemical Institute's National Titration Competition, with James achieving a gold medal and Ryan and Anooj each taking home silver.

The team qualified for October's National Finals after winning a Bronze Medal at the ACT Titration Stakes in July. Both competitions were held at the Australian National University's Research School of Chemistry.

So what's titration, exactly? Titration is a laboratory method of quantitative chemical analysis that is used to determine the unknown concentration of an identified analyte. (If explaining what it is is difficult, imagine the skill required to complete the task!)

Congratulations to Anooj, James and Ryan, as well as their teacher Anne McKinnon and other science staff, for achieving such a great result.

NEW SCIENCE BLOCK *TO BE READY FOR ACTION*

SENIOR SCIENTISTS at MacKillop will finally have the learning space they deserve, with the new Science and General Purpose buildings set to be ready around the start of the 2018 school year.

No longer will the Wanniasa Science Labs put their counterparts at Isabella to shame!

Construction of the two buildings, as well as a courtyard and several walkways, took place over the course of 2017.

The new Science Building will feature three specialist laboratories for the study of physics, chemistry, and biology, and three rooms for general science and general use. All of these rooms will open up to an open learning area, much like the area at Wanniasa.

The General Purpose building will feature a range of flexible learning spaces and should mean that the demountable classrooms will no longer be required.

Plans for the existing Science block are yet to be finalised, but the interior is likely to receive some extensive renovations.

Exciting times for the Isabella Campus!



SCIENCE+TECHNOLOGY NEWS



BRAIN BEE

The Australian Brain Bee Challenge is a competition for high school students in Year 10 to learn about the brain and its functions, learn about neuroscience research, find out about careers in neuroscience and to dispel misconceptions about neurological and mental illnesses. The team from MacKillop made it through the first round and competed in the State Final where they finished 3rd overall. Congratulations to Alexis Lanuza, Amy McGregor, Angela Ovari, Matthew Baker and Aiden McLachlan.



GIRLS IN STEM

On the 19th of July, a select group of Year 11 and 12 girls attended a program at the ANU Department of Engineering. The focus of the day was to promote the admission rates of women in the STEM area (Science, Technology, Engineering and Mathematics), and then sustain those higher numbers. The variety of girls, who attended from schools all over Canberra, participated in workshops catered to each of the areas of engineering; biomedical, mechanical, civil and environmental. We were also lucky enough to be supplied with lunch and a free t-shirt. The day was an eye opening experience for many of the girls who had never before considered engineering as a future pathway.

nikala speed

Year 12 student

COMPETITION SUCCESS

The ANCQ is an international Chemistry competition. The quiz is designed to test students on their chemistry knowledge in an exciting and stimulating way. Congratulations to Ryan Walls (Year 12), James Crispin (Year 11) and James Daly (Year 11) who all achieved a High Distinction.

The Australian Science Olympiad is an opportunity for high achieving Year 10 and 11 students to extend themselves beyond school science through challenging exams. Congratulations to the following students who achieved a credit or higher: Annabelle Morton (Credit in Physics), Lauren Crispin (Distinction in Physics), James Crispin (Distinction in Physics) and Josh Forster (Credit in Biology).

PHYSICS VISIT TO ANU

On 18 October, the Year 11 Physics classes were lucky to go to the ANU Nuclear Physics Labs. The best part of this excursion was seeing the proton accelerator, which was around 22 metres high. We saw numerous stations that record the data from the proton accelerator and it was impressive the amount of wires and connections needed to process the data. The plasma cannon was very cool as you could see the internal physics and could use the heat from the cannon to test how resistant materials were. The excursion allowed us to see what careers physics could offer and the numerous avenues for current research.

phy manigom

Year 11 student

SCIENTIST VISITS

On Wednesday 8 June, Dr Jonathon Kocz came to share his incredible knowledge of outer space with some of our Year 7 students as part of their learning about space. Doctor Jon is a MacKillop College graduate (class of '99) who boldly leapt into the field of Astronomy. Following many years of tertiary study, including a PhD at the Australian National University and post-doctoral fellowships at Swinburne and the Harvard-Smithsonian Centre for Astrophysics he now specialises in radio astronomy. Doctor Jon spent two years working at NASAs Jet Propulsion Laboratory (USA) and now explores the universe fulltime at CalTech in California. He works on radio telescopes and builds telescope arrays around the world and is currently trying to discover the origin of Fast Radio Bursts - high energy bursts from space that last only milliseconds.

During semester 2, Year 12 Biology students were fortunate to have Professor David Rowell from the ANU come to the College. He spoke about Charles Darwin and his Theory of Evolution. David also discussed his current research on speciation in velvet worms in the Talleganda state Forest.

Dr John Evans came and spoke to Year 11 Earth and Environmental Science students about his work on Photosynthesis in different types of plants. We learnt about electron transport chains using tennis balls. He increased our awareness about the need to improve the photosynthesis process to meet the world's growing food needs.

In Term 3, Year 11 Biology students were visited by David Rowell, the local Spider-Man. He brought along specimens to show the students and talked to us about his work with the ANU. He is a research biologist and dedicates his life to the study of invertebrates, even after getting bitten so many times!



FIRE AND FLAMES

A Year 12 Chemistry excursion to ANU to attend Dr Peter Wother's presentation, "Fire and Flames", occurred on 11 September. Spectacular demonstrations of combustion reactions fascinated the audience, including demonstrations of burning underwater and without oxygen. The year 12 class was accompanied by Mr Fritzlauff and Mrs Mackinnon and enjoyed a short break at the ANU Pop Up Village to experience facilities available in preparation for their transition to university in 2018.



SCIENCE EXCURSIONS

On 21 August, the Year 12 physics class went to the ANU to explore the practical applications of the quantum theory. Students went to the laser lab to see an experiment on space-time distortion and a machine that accurately finds the acceleration of gravity on Earth by freezing particles.

Senior Earth Science students went to Geoscience on 29 August, where they learnt about plate tectonics and the SHRIMP. The SHRIMP is not the giant prawn but a really cool rock dating machine. Students also observed seismic activity occurring all around the planet.

As part of the national effort to conserve endangered woodlands the ACT Government has established several nature reserves that protect box-gum woodlands around Canberra. Year 11 Biology students were given the opportunity to visit Mulligans Flat Woodland Sanctuary in North Eastern Gungahlin. Students were able to see an Eastern Bettong and take various Ecological measurements within the sanctuary.



SCIENCE WEEK

Science Week was held from the 12-20 August. Students on the senior campus were able to participate in a science quiz and make honeycomb and sherbet. Tim McInerney, a geneticist from the ANU, also spoke to Year 10 and Year 12 students about the statement that '8% of the world population is related to Genghis Khan'. Students on the Wanniasa Campus were treated to a number of different presentations.

SCIENCE WEEK SCAVENGER HUNT

The school ran a scavenger hunt for National Science Week. There were some interesting items that we had to find like Albert Einstein's 72nd birthday photo and igneous material but it was well worth it for the \$100 Westfield gift voucher. There was some big competition when it came down to two groups and deciding who won - the teachers found it too hard so called it a draw. It was a fun activity to do and I learnt some new things.

lexie cornwall

Year 7 student



DISEASE MUSEUM VISIT

In Semester 1, Year 12 Biology students travelled to UNSW Sydney to visit the Museum of Human Disease. Students were given a presentation on lifestyles choices and were then free to walk around the museum and view the collection of 2,000 specimens of human tissue.

SCIENCE • TECHNOLOGY • MATHEMATICS



PARLIAMENT OF YOUTH ON SUSTAINABILITY

On 29 May, students from the College participated in and helped facilitate the Parliament of Youth on Sustainability at the Manning Clarke Centre. The College had three teams: Sarah Muir and Taran Copeland, Lani Bevan and Miriam Mayenco, and Harleen Kaur and Aisling Kinsella. Lani and Miriam's proposal and Harleen and Aisling's proposal were voted by their peers to be presented to the ACT legislative assembly. Aisling and Lani then had the opportunity to present their views to ACT parliamentarians on 13 June.

The following Year 12 students did a fantastic job in helping facilitate the sessions: Shweta Venkataraman, Dominique Tse, Leo Phimpavichith, Zoe Hoare, Charlotte Egan, Katherine Thomas, Lauren Frost and Sam McDonough. Jack Adamson and Paula O'Sullivan did a great job helping with the interactive stations.

ummechani rangwalla

Science Teacher

DA VINCI DECATHLON

In June, a team of Year 8 students competed in the Da Vinci Decathlon at Canberra Grammar School. The competition consisted of many questions and problems to solve around 10 different subject areas. The team took part in the Creative Producers category, where it presented an eight-minute skit using Michael Jackson as a historian and Poodles the Panda as his imaginary sidekick. The team was surprised and excited to win first place in the Creative Producers category. Congratulations!

neelima gupta

Mathematics Teacher



JUNIOR MATHS EXCURSION

On 24 March, Mrs Bright and Mrs Fletcher took 29 students from Year 7 to Year 9 to a performance by Matt Parker, a comedian and mathematician. On the topic of technological maths, he showed us many examples of coding and real life examples of math problems, such as how to always find the final number in an Australian bar code, how recorded sound and digital screens work, and he even showed us how to use binary. We drove out to Canberra Girls Grammar and enjoyed the hour long show with other schools in the region. We all loved the experience and it was fantastic to have an educational opportunity like this.

01010100 01101000 01100001 01101110 01101011 00100000 01110101 00100000 01001101 01100001 01110100 01110100 (Binary Translation: Thank u Matt)

olivia boddington + oren lever

Year 9 students



WORLD SKILLS COMPETITION

Tom Seaman (Year 12) competed in the World Skills competition at CIT Reid in October. The challenge for the day was to create a frame with nine different joins using hand tools only. Tom competed against 20 other students.



YEAR 11 SPECIALIST MATHEMATICS

We don't all do Lit
But we'll make it fit
It might just rhyme
If we spend the time
We're year 11 Spec
Equations we wreck
Numbers Imaginary or real
As long as there's chips, it's a deal
 i is the square root of negative one
complex numbers can be fun
the Argand plane cannot be flown
it's where complex vectors can be shown
take the sign and flip it round
then the conjugate will be found
If you have a question don't ask me
This proof is done QED

Written by Mrs Chand's Elite (Mrs Chand, Sarah Purcell, Isaac Adera, Daniel Wallis, James Daly, James Crispin and not Cameron Fidge)

YEAR 12 MATHS RAP

Knees weak, palms are sweaty math test next and I'm not ready, I stare at my Apple phone, when I could be making 3.14 apple pies, I'm trying not to lie that I've studied to achieve high on that upcoming task. I redirect my questions to others so I don't have to ask. The guy that will roast you even if you try, man I look at the wall and think even Chandra must be scared of this guy. Grey beard, grey shirt, grey hair, but wise, this guy knows all of math's secrets and how it flies, knows time series, sequences, vectors and space, he's solved every equation, he's next creation he says is called 'just something small,' yet without it the world would surely fall, like the Wall Street crash he says that math is the sexiest of all, nothing's got more curve, more swagger, more skill than the numbers he spits that are a testament to his will, he crunches numbers like he crushes the day dreams of his apps kids class, it all happens so fast, you see your calculator's got no class, its glass cracks at the speed that of this guy's math, and if you're eating in class you better scoff it fast because if he catches you, you'll be out on your ass, that corridors cold Kuzma knows, he's got no soul, he'll just keep on cooking up that math.

riley shield

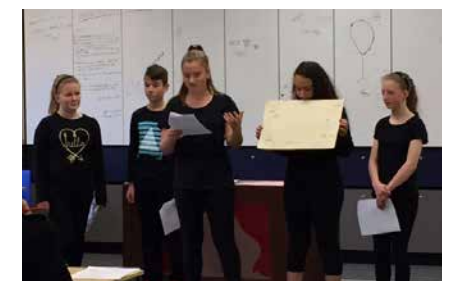
Year 12 student

LAKE TUGGERANONG EXCURSION

In Term 2, students went on a combined I-Hum and Science excursion around Lake Tuggeranong. We walked from the Isabella Campus to the lake, observing the environment around us. We learnt about the waterways, the plants and animals. We learnt what plants live there and why and why the waterways are where they are. I learnt lots of new and interesting things about the Canberra environment.

miranda kamp

Year 7 student



TOURNAMENT OF MINDS

Congratulations to the students who participated in the Tournament of Minds Regional Competition in September. Teams of students in Years 7, 8 and 9 worked collaboratively each week preparing for their long-term challenge in the fields of Mathematics Engineering and Science Technology. Both teams performed well, with the Science Technology team winning their division. Congratulations to: Olivia Boddington, Rhys Haynes, Gabby Milgate, Montana Mundy, Kira Tawton, Matisse Winfield (Science Technology team), Alex Amon, Patrick Cunningham, Callum Doherty, Mikayla Fitzpatrick, Tyla Hardy, Aaron Nguyen (Mathematics Engineering team).

Also, a huge thank you to Julia Del Bianco and Caitlyn Williams who gave countless hours after school assisting in the facilitation of the activity!

beth bright

Numeracy Coordinator

SCIENCE+TECHNOLOGY STATS AND FACTS

1/2

of students are open to forming friendships with artificial intelligence in the future. The other half are happy with human interaction.

FUN FACT: The average person walks the equivalent of five times around the world in a lifetime.

Only 62% of students believe that the shape of the Earth is an imperfect oblate spheroid (which was probably the most accurate description we could find). We might have had some trolls in our survey, though, since 18% of students claimed that the Earth is flat. That, or we've horribly failed some 18% of students in our Science classes.

CHEMISTRY and BIOLOGY are tied as the two favourite areas of Scientific study at MacKillop.

Apple is the preferred brand of phone for 3/4 of our students.

7%

of MacKillop students would like to work in Science/Research after school.

4/10

FUN FACT: Four in every ten people in the world have an internet connection.

IT STATS

In the month of November, the top search query was "How to get help in Windows." The second was "NBA."

The College downloads, on average, 19.79 terabytes of data per month.

We visit www.google.com 339,450 times per month through the MacKillop network. In contrast, we visit www.bing.com 168,161 times per month.

4%

of MacKillop students would like to work in construction trades after school.

If you have a love for Science & Technology, get ready for some fun new courses and units. From 2018, the College will offer Engineering, Oceanography, Cosmetic Science, Forensic Science, and Radio Astronomy. Some of these are STEM courses, which is a rapidly growing area at MacKillop.

41.8

FUN FACT: If you write out "pi" backwards to two decimal places, it spells "pie."

8% of students think that they'll NEVER use mathematics once they leave school.

UP AND ATOM

FUN FACT: Hydrogen is the most abundant element in the universe: a massive 88% of all atoms are hydrogen.

There are 8 times as many atoms in a teaspoonful of water as there are teaspoonfuls of water in the Atlantic ocean.

FUN FACT: There's enough carbon in a 70kg human body to make around 9000 pencils.

SCIENTIFIC AND TECHNOLOGICAL NEWS AND ADVANCES OF 2017



A huge iceberg broke away from the Larsen C ice shelf in Antarctica in July. A study into climate change concluded that the world's oceans are warming at least 13% faster than previously thought.



Researchers at MIT and University of California developed a device that can pull water out of the air in weather conditions where there's as low as 20% humidity. This could be revolutionary to areas where there's little access to clean water, including many parts of Africa.



Evidence suggests that homo sapiens may have originated 300,000 years ago – much earlier than the 200,000 years ago thought previously – and that homo sapiens may have migrated out of Africa as far back as 270,000 years ago. It's now thought that Aboriginal people have been in Australia for at least 65,000 years.



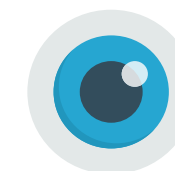
Harvard University discovered how to turn hydrogen into a metal, which could revolutionise the modern world – especially in terms of space travel and rockets. The discovery was a huge step, but there's still a lot of research to go.



The UN declared 2017 the International Year of Sustainable Tourism



IBM announced 'IBM Q', an initiative to build commercially available universal quantum computing systems.



The first synthetic retina was reported to have been created at the University of Oxford.



The Great Barrier Reef was hit by a second consecutive mass coral-bleaching event in April.



Billionaire Elon Musk has laid out plans for the future of human settlement on Mars.



Musk also pledged to fix the South Australian energy crisis, with Tesla building a giant lithium ion battery to store energy.



Gravitational waves were discovered, further supporting Einstein's theory of general relativity.



Scientists have found a way to remove faulty DNA from human embryos.

