



ACT
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Education

Melrose High School Newsletter



"A community of learners building on a tradition of excellence"

Issue 16: 16 Dec 2016

Leadership Team News

We have reached the end of another busy school year and have been reminiscing about what we have achieved along our journey. Before revelling in the successes outlined below, we would like to say thank you to the students, parents/carers and staff for their patience as we have undergone so many upgrades to our facilities. Whilst everyone is on break we will continue to upgrade facilities and replace resources. It is anticipated that students will return to school with new carpets on the second floor and access to the Soccer Precinct.

Term Four is so busy and always full of mixed emotions as we bid farewell to our incredible Year 10 students and some amazing staff. To these valued members of our community we say: Congratulations Year 10 we are so very proud of what you have achieved and have been honoured to be part of the journey.

To the unsung heroes of school, the Front Office Team, what would we do without you? Good bye and good luck to:

- Borka Kresoya we hope you enjoy your new adventure at Canberra College
- Jenny Austin we hope you enjoy your new adventure at the Amaroo School.

To our educators, those who impart knowledge and mould our young people, we say good bye and good luck to:

- Stephannie Dormer – thank you and congratulations on your new appointment as Executive Teacher at Gungahlin College.
- Eva Franklin – thank you and we hope you find what you are looking for at home in Ireland.
- Nick McNamara - thank you and congratulations on your new appointment at Campbell High School.
- Chris O'Hare – thank you and enjoy all the pleasures of retirement; grandchildren, travel and relaxation.
- Karishma Reddy - thank you and congratulations on your new appointment at Calwell High School.
- Calen Robinson - thank you and we hope you find what you are looking for in Melbourne and congratulations on your new appointment at St Peter's College, Cranbourne.
- Daisy Ruan - thank you and congratulations on your new appointment at Canberra Grammar School.
- Natasha Turner - thank you and enjoy all the pleasures of retirement and enjoy your travel and relaxation
- Conor Laenen - thank you and congratulations on your new appointment at Canberra High School.

To our contract and relief teachers and administrative staff we say goodbye, good luck and big thank you to:

- Samantha Briggs – Food Technology
- Antoinette Carnovale – Learning Support Assistant & Front Office
- Andy Cruwys – Japanese
- Rosemarie Edwards - Learning Support Assistant
- Robert Howatson – English
- Steven Walters - Health & Physical Education
- Sean Verdon - Learning Support Assistant

2016 - Let's break it down

Student Census

- Melrose HS currently has 746 students enrolled for 2016 including:

- 54 Aboriginal and Torres Strait Islander students
- 36 identified Special Needs students
- 14 International students
- Students at MHS speak 36 different languages; this will increase to 41 different languages when we welcome new students in 2017.
- In 2017 we welcome 182 new Year 7 students and 24 new students in Years 8-10.

Classes

- Approximately 180 classes are conducted each day. After taking out a few days for public holidays and carnivals that's roughly 35100 classes over the year.

Big Picture

- 33 students participated in the Big Picture Program (BP)
 - 40 participated in the Learning Through Internship for their BP Project
 - 21 students will be in the Year 9 Big Picture Advisory for 2017
 - 17 students will be in the Year 10 Big Picture Advisory for 2017

Academic Curriculum Extension (ACE) Program

- 54 students participated in ACE Science
 - 22 of these students also participated in ACE Science Mentors Program
 - 2 students from Canberra College are currently participating in the ACE Science Mentors Program
 - 2 students from Alfred Deakin High School are being mentored by Geoff McNamara through the McNamara-Saunders Astronomical Teaching Telescope
 - 7 students participated in ACE Science mentoring work placements in specialist fields.
- 56 students participated in ACE Maths
- 59 students participated in ACE English
- 36 students participated in ACE HaSS
- 15 students participated in ACE Drama
- 30 students participated in the Elite Sports Program (ESP)
- 24 students participated in ACE Outdoor Education
- ACE and other student participated in the following competitions:
 - Australian Geography Competition – 95 students
 - ICAS Spelling Competition – 3 students
 - ICAS Writing Competition – 9 students
 - ICAS English Competition – 28 students
 - ICAS Digital Technologies Competition – 5 students
 - Big Science competition – 23 students
 - ICAS Science Competition – 24 students
 - RACI Chemistry Competition - 19 students
 - AMT Australian Mathematics Competition – 51 students
 - ACER Language Certificate 1 (Year 7 & 8) – 5 students
 - ACER Language Certificate 2 (Year 9 & 10) – 1 student

School Leadership

- 56 Year 10 students participated in the Peer Support Leadership Program
- 34 Year 9 students participated in the Peer Support Training program at Birrigai in Term Four in preparation for selection as Peer Support Leaders for 2017
- 25 students were members of the School Representative Council (SRC)
- SRC participated in the following programs and fundraisers:
 - Diversity Day – promoting diversity at MHS and fundraising for school mural
 - Superhero Day – fundraising money for Abundant Water
 - Movie Night – celebration of SRC work and build community connections

Vocational Education and Training

- 3 students participated in the C4 Construction Program through the Master Builders Association and 2 students gained fulltime apprenticeships

- 81 students have participated in Work Experience
- 6 students participated in a Flexible Learning Option for 3D Animation, Fitness and T10 RSA
- 18 completed White Card and Asbestos Awareness Training
- 12 completed Responsible Service of Alcohol
- 11 students participated in Disability Awareness and Careers Workshop

Physical Education

- 35 students acted as Officials at the cluster primary school sporting carnivals
- 20 students represented MHS at the Zone and ACT Swimming Carnivals
- 70 students represented MHS at the Zone and ACT Cross Country
- 20 students represented MHS at the ACT Athletics
- 4 students participated in Schools National Athletic Championships
- Students participated in the following School Sports teams:
 - Volleyball
 - Basketball
 - Mixed Hockey
 - Touch Football
 - Soccer – teams made the finals
 - Rugby 7s – won the competition
 - Oz tag
 - Netball – team made the finals.

Music Programs

- 45 students participated in the Concert Band
- 4 in the ACT Junior Concert Band
- 1 in the ACT Percussion Ensemble
- 2 in the ACT Senior Concert Band and Senior Jazz Band
- 32 in the MHS Beginner Band
- 1 in the ACT Flute Ensemble
- 3 students are members of the MHS Saxophone Ensemble
- 8 students in the MHS Backstage Crew – assemblies, performance, awards
- 6 students are members of the MHS Vocal group

21 Century Learning

- 21 teachers are using the 21st Century Fluencies to embed a project based learning assessment task(s) into one of their units
- Three of these teachers have been showcased in an educational publication, *Assessment of 21st Century Learning* for their use of evidence based leading practice in their classrooms
- 30 teachers and their students showcased their work to MHS community at the Fluency Expo
- 170 primary school students, 6 visiting teachers and 30 MHS student leaders participated in a thinking carnival at the Fluency Challenge

Student Wellbeing

- The school is committed to the social and emotional wellbeing of students and as part of this commitment has:
- Extended the days that the school has an available School Psychologist
- Connected with external agencies to provide pastoral care programs such as:
 - 8 students participated in the PCYC Adventure Program
 - 3 students participated in the PCYC Day Programs
 - 4 groups of 6 students participated in the Equine Therapy Program at Sherony Park
 - 16 students participated in the Choppers program (male mentoring through metal working)
 - 12 students participated in the Menslink Program
 - 2 students participated in the Messengers Art Program through the Tuggeranong Arts Centre
 - 8 students participated in the Messengers Didgeridoo Program through the Tuggeranong Arts Centre
 - 6 female students participated in a Girls Program that focussed on socialising self-esteem building

- 11 students completed the Yellow Lantern Girls Leadership Program
- 24 students from Year 8 completed Swing into Life – team building and developing peer relationships
- Establishment of the URSaf@melrosehs.act.edu.au email address to contact the staff at the Student Services Team for any reason.

Aboriginal and Torres Strait Islander Education

We have 54 Aboriginal and Torres Strait Islander students whose personalised pathways have included:

- Access to the Indigenous Education Centre
- 40 students participated in the Australian Indigenous Mentoring Experience (AIME) – MHS is one of the only schools that have taken on the Gold Package which provides them with access to tutoring from the Australian Defence Force, ANU and UCAN, a guest speaker for NAIDOC week and AIME uniforms
 - A year 9 student designed a computer game as part of AIME and was selected as the only ACT representative to go to Sydney for a one week Game Development Program
- 15 students participated in the Royal Lifesaving Swim Program
- Welcome for new Year 7 students on half day transition program
- We welcomed 8 students and 4 teachers & support staff from the WA remote area school, Pia Wadjarri to celebrate The Square Kilometre Array Project
- Farewelled 13 Year 10 students onto College
- Chloe Ives won the AIME Ambassador and Pierre de Coubertin Award
- Rap for Melrose Cluster
- Students designed and completed artwork for YMCA Reconciliation Action Plan, which have been displayed Lanyon Youth centre – many of these have been purchased.
- Year 9 & 10 girls participated in several leadership programs including:
 - Girls to Women Careers Day at University of Canberra
 - Smith Family Leadership
 - YWCA Girls Leadership Program.

Special Needs Program

We have 36 identified Special Needs students whose personalised pathways included:

- 8 participated in core classes in the Learning Support Unit
- 14 participated in core classes in the Learning Support Centre
- All students are participated in mainstream Physical Education and electives program
- 1 student participated in BP Elective program.

Bring on 2017! We look forward to sharing new adventures with you all.



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Shannon Carnovale
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Fiona Dempsey
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Contacting us in the holidays

The Front Office will close on Friday 16 December at 4 pm and reopen on Tuesday 24 January 2017. If you need to contact us please use the frontoffice@melrosehs.act.edu.au email. It will be checked periodically over the break.

2017 Start dates

Monday 30 January 2017

All Year 7 and New Year 8-10 students and Yr 10 Peer Support Leaders- Please assemble in the School Hall by 8:50 am

Tuesday 31 January 2017

All students return - Please line up outside the hall by 8:50 am for Assembly

Year 7- 2017

Hello, once again, to all prospective student with us next year. I wish you all a happy and healthy break before the start of what is a big year for you. It'll be full of excitement, challenge, fun and hard work, but I and many others at MHS will be there to help you and help celebrate your successes too!

To parents/guardians of these treasured youngsters, we are a welcoming and caring place and we do like to help nurture and develop the potential in your children. If you do have any questions/concerns or compliments for the school or staff please feel free to email me at stuart.gilmore@ed.act.edu.au or phone on 6205 7599.

Wishing you all a peaceful and productive Christmas/New Year festive season and to seeing you all on Monday 30 January 2017 for the first day of Secondary School.

Best wishes and warm regards
Stuart Gilmore

Melrose High School Board Elections

If you are keen to contribute to the governance of Melrose High School, then the School Board needs you.

The 2017 School Board will have vacancies for two (2) Parent representatives. These positions will be for a term of 2 years. Nominations will open 11 am, Monday 30 January 2017 and will close 11 am, Monday 13 February 2017. Official nomination forms will be emailed to families in January or will be available for collection from the Front Office from Monday 30 January 2017.

For more information please contact the Assistant Returning Officer, Ruth Mahon on 6205 7592 or by emailing ruth.mahon@ed.act.edu.au

		Melrose High School https://www.facebook.com/MelroseHSCanberra
		Melrose School Library https://www.facebook.com/MelroseHSLibrary
Connect with us and keep up to date with what is happening around the school		Melrose Magazine https://www.facebook.com/Melrosemagazine

2016 Melrose High School Award winners				
Award	Year 7	Year 8	Year 9	Year 10
Barry Bourke Scholarship	Rosette Wanis	Ebony-April Waters-Spencer	Lainey Morgan	Sharmin Sultana
English	Safa Fahiz	Samuel Kirk	Khadeja Khan	Jason Woods
Maths Medal	Rochelle Yip	Sarah Robinson	Khadeja Khan	Alisa Vilaythone
Humanities and Social Sciences	Hana Franklin	Sarah Robinson	Khadeja Khan	Jason Woods
Science	Sidney Lee	Sarah Robinson	Shamima Islam	Quinn Graco
Japanese	Poppy Hancox	Sarah Robinson	Emily Bryce	Ashley Khaw
Indonesian	Safa Fahiz	Kathlynn Khaw	N/A	N/A
Chinese	Elizabeth Fatiaki	Kyle Skriveris	Grace Hindmarsh	Hyun-Ji Kim
PE Girls	Logan Ganas	Laura Croft	Nomusa Zulu	Bianca Schulze
PE Boys	Teliya Hetaraka	Joshua Bilski	Oliver Davies	Jason Woods
Year 10				
EALD	Alisa Vilaythone	Dux (ACU Award)	Jason Woods	
Drama	Sibusiso Sithole	Long Tan Award	Jasmine Thornton	
Art	Alexia Weekes	Minister's Excellence Award	Taylor Sibley	
Dance	Shekiralea Healy	ACT DET Excellence Awards	Erin Cowey	
Music	Kelsey Hill		Marwa Fahiz	
IT	Lliam Davis		Sibusiso Sithole	
Food	Russell Woodford	Grimshaw Award	Jason Woods	
Woodwork	Erin Cowey	Elizabeth McKenzie Award	Christopher Brown	
Metalwork	Logan White	Pierre de Coubertin	Chloe Ives	
Sharon Merydyth Award	Taylor Sibley	Trish Thomas Male Sports Star	Jacksyn Morgan	
Debbie Barlett for Excellence in HaSS	Erin Cowey	Trish Thomas Female Sports Star	Chloe Ives	
Ian Fletcher Award	Katherine Brown	AA Stevenson Leadership Award	Anita Basic	
Lissette Skobier Award	Sebastian Thiele	Greg Robinson Indigenous Award	Chloe Ives & Izaac Davidson	
Taipei Economic and Cultural Offices In	Kristen Publico & Vanessa	Robert Harvey Memorial Bursary	Chibuzo & Ndubuisi Obinna	
Member for Canberra Kurt Steel Memorial Award	Lliam Davis	Principal's Art Acquisition Award	Alexia Weekes	

BYOD

A new webpage has been set up on the School Website to include information regarding the roll out of Bring Your Own Device (BYOD) for all students in 2017. Included on the page is information regarding types of devices and a list of suppliers. Visit the page at <http://www.melrosehs.act.edu.au/ict/byod>

Mathematics

2016 Canberra Mathematical Association Medals

Congratulations to the top student in each year group:

Year 10 – Alysa Vilaythone

Year 9 – Khadeja Khan

Year 8 - Sarah Robinson

Year 7 - Rochelle Yip

2016 Australian Maths Trust Enrichment Programme 'Mathematics for Young Australians'

Congratulations also to Sidney Lee, Jacob Wu, Hamish Hunter, Adrian Gover, Maximus Jones, Rosette Wanis, Jade Lakatos, Poppy Hancox, Samuel Heazlett, Sterling Potter and Rochelle Yip who achieved highly. Congratulations to all those who entered competitions, extension and enrichment programmes this year. We have had a great year and look forward to you participating next year.

Date for your diary: The Mathematics Competition will be on 27 July 2017. A competitions form will go home in the first week after the holidays.

We wish and your families you a safe, happy and healthy holiday.

The Maths Faculty

School reports

This year we have been working towards reducing the amount of paper used at school, as part of this process we trialled emailing Year 7 reports home in Semester One and all reports home in Semester Two. Thank you for all of the positive feedback we have received from families regarding the changes in our practices. Families who have requested hard copies will also receive an electronic copy and hard copy will be made available for collection from the school.

Changes to reporting processes in ACT public schools

In 2013 all ACT public schools student reports for students in Kindergarten to Year 10 changed to include reference to the Australian Curriculum Achievement Standard for each year level. Achievement Standards describe what students are typically able to understand and do at each year level.

More information about Achievement Standards, including work samples to help teachers make judgements about student achievement is available on the Australian Curriculum Website at: www.australiancurriculum.edu.au. The website provides a useful guide to support your child's learning and your understanding of the process.

In ACT public schools the Australian Curriculum Achievement Standard is aligned with a 'C' grade. The 'C' grade indicates that your child has demonstrated a satisfactory level of knowledge, understanding and skill in relation to the Achievement Standard.

The A – E Report Format

Your child's report will list a grade for each subject studied. The number of A - E grades given to students in each year level will also be included as part of your child's report.

The following A–E descriptors will appear on the report:

- A demonstrating excellent achievement of what is expected
- B demonstrating a high achievement of what is expected
- C demonstrating satisfactory achievement of what is expected
- D demonstrating partial achievement of what is expected
- E demonstrating limited achievement of what is expected

Further Information

For more information please:

Visit the Melrose High School website at: http://www.melrosehs.act.edu.au/our_curriculum/assessment_and_reporting

Visit the Australian Curriculum website at: www.australiancurriculum.edu.au

Visit the ACT Education Directorate website at: http://www.education.act.gov.au/teaching_and_learning/assessment_and_reporting/act_student_reporting2

Arts & Technology

It has been a huge year for Arts and Technology in 2016. We have enjoyed teaching all our students and are so pleased with the amazing work they produced. 2017 is looking to be a new and exciting year with a number of staff changes. We'd like to thank Sam Briggs for her work with us this semester. Sam will be exploring the world in 2017. On Friday we are farewelling Nick McNamara who is moving to Campbell High, Calen Robinson is venturing down to Melbourne to be closer to family and Stephannie Dormer is moving over to Gungahlin College. All staff have a strong focus on the students and although they will be missed, we wish them all the best in their new adventures. In 2017 we will be welcoming Neil Craven as our new Wood and Metal teacher. Neil has some amazing ideas that he is bringing with him.

English

2016 has been a big year for the English Faculty, with quite a few staff changes throughout the year. Faculty Executive Teacher, Ms. Jenni Holder left us for most of the year, as she took maternity leave and welcomed a beautiful new daughter into her life. Mr. Nathan Scibberas took over in Jenni's absence, before taking leave himself and then returning to Melrose High to teach Music full-time. It has been a privilege to join the English team in Semester 2, and stand in for Jenni while she has been on leave.

We have some farewells to say. Long-serving English teacher, Ms. Eva Franklin, will be returning home to Ireland to begin a new chapter in her life's story. Mr Robert Howatson, who joined us on a contract in Semester 2, will also be leaving us, to take up a new English teaching position in Cooma. On behalf of the English faculty and Melrose High School, I would like to thank both of these teachers for their hard work and dedication. They will both be missed.

We have been busy right up until the end of the school year. Under the leadership and guidance of Mr Robert Hamburger, the English faculty has been working with all of their classes to assess the literacy skills of students as they prepare to exit their current grade and move up into their next year of schooling. The information that we have collected over the past few weeks has provided us with a great snapshot of exactly where your child is at, with regards to reading, writing, spelling, grammar and punctuation. This will provide your child's 2017 teachers with a good understanding of exactly where their students are at with their literacy skills and will help us track their progress over the coming year.

Next year will be busy as always. There will be many opportunities for students to extend themselves inside and outside of the classroom. Competitions will run throughout the year, and I strongly encourage all students to participate in these. We will continue to offer our Year 10 students electives in Semester 2, and will use feedback from this year's cohort of Year 10s to refine the curriculum electives we deliver. Ms. Jenni Holder will return to the helm of English, and we all look forward to her return.

Congratulations to all of our award winners. This year, the Sharon Meredyth Award for English was won by Taylor Sibley.

The top students in each year level were:

Year 10 – Jason Woods

Year 9 – Khadeja Khan

Year 8 – Samuel Kirk

Year 7 – Safa Fahiz

The English faculty wishes all our families and safe and enjoyable holiday season, and we look forward to working with you again next year.

Conor Laenen – Acting-Executive Teacher, English Faculty

The **Australian Research Alliance for Children and Youth** (ARACY) has been engaged by the Education Directorate to develop parent engagement resources for teachers, parents and carers of students with complex needs and challenging behaviour.

ARACY is inviting parents and carers of ACT primary and secondary students to participate in small group discussions focusing on how families and schools work together to support the learning of students who experience particular learning challenges. Participants will be asked questions to explore their experiences of what works well and what doesn't work well, and perspectives about the quality of the connection between home and school.

The discussion groups will take 60 - 90 minutes. Interviews will also be available for individual participants, where preferred. These will last approximately 60 minutes.

Participants will receive a \$50 Coles-Myer gift voucher as reimbursement for time and input into the research.

Interested parents and carers can contact Barbara at ARACY via phone 6248 2400 or email barbara.barker@aracy.org.au.

BIG PICTURE – OUR FIRST YEAR IN REVIEW

2016 has been a most interesting year for all of us involved with the Melrose High School Big Picture Academy (BP). In our inaugural year, we focussed primarily upon structure, function, routine and operating procedures – for both staff and students – working hard together to make the new program as successful as it could be and to establish ‘best practice’ for all concerned as we look to 2017.

It is a fact that we all learned so much from our first year together and that we experienced the full range of emotions from tears to laughter as we navigated the unknown territory of student learning by enquiry. There were moments of confusion about how best to proceed for all of us at one time or another, but I think when all is said and done, it has been a very valuable and worthwhile learning experience for us all.

Our students and we struggled initially with the transition from directed learning in the classroom to deciding what each individual would like/need to focus upon as they pursued their personal passions with the guidance of their teacher advisors and workplace mentors. By the end of 2016 though, we were amazed by and very proud of our students. The growths in their personal qualities, the deepening of their social reasoning and the level of their academic achievements have been incredible. Rob Morris, Calen Robinson and I would like to thank each student for their good humour (mostly) and for accepting a huge challenge and bearing the bumps and bruises with us.

Yes, our dear students! Despite the numerous maniacal rants about personal organisation, meeting deadlines, research quality, keeping a detailed journal, inclusion of more depth in your empirical and quantitative reasoning learning goals, keeping the room clean, washing up, evidence, EVIDENCE and MORE EVIDENCE! Thank you for all the extra grey hair and wrinkles – it was a hoot. Seriously, we have learned as much as you and we thank you for it.

Here now, are some of the successes in BP this year of which we are very proud. These figures have been drawn from an anonymous survey of our BP students.

- Number of parents attending student exhibitions (4 per year) - 82%
- I have improved my personal organisation skills – 85.6%
- My Adviser challenged me to do my best work – 88.2%
- I feel I am a more independent learner because of my time in Big Picture – 70.6%
- I achieved better results than I would have in mainstream classes – 70.5%
- I am happier at school – 94.1%
- I have been successful in Big Picture – 88.1%

Here are some of the projects pursued by our BP students during 2016:

- Zoology/Biology/Environmental Studies (4 students): wombats, felines (Big Cats), Animal Conservation, Animal care and maintenance, Cystic fibrosis.
- Business Studies and Engineering (2 students): Design a skateboard and associated art graphics, design and develop a flying drone and aerial photography.
- Performing Arts (3 students): dance; develop music program for Primary school students, backstage and production. Writing and performing personal music compositions.
- Cooking and Catering/Food Science (2 students): Design a Healthy Eating Program for Primary School Students, Macronutrients & Diet, Diet of an athlete.
- Sociology/Psychology/Wellbeing (6 students): Explore Depression and Anxiety in Teens, The psychology of sleep, Dissociative Identity Disorder, Youth Worker/Parole Office/Drug & Alcohol Rehabilitation, Art image effects upon mood, Exercise Physiology and Diet.
- Information Technology: Web Comics, Web Design, Games Programming and design.
- Visual Art (2 students): The psychology of colour, Digital Art, Photography, Fashion design.
- Astronomy/Astrophysics (1 student): A study of black holes.
- Manual Arts (2 students): mechanics, carpentry and computer assisted design.
- Health and Physical Education (2 students) Sports Fitness, Beauty therapy.
- Literature/Writing/Literacy (5 students) Professional writing, Become an Author, Fantasy Writing, Creative Writing.
- Legal Studies/Government (1 student): Constitutional Vs Common Law - Refugees

As readers can see, the feedback from our students about their successes and the range of subjects studied by our students in BP was amazing. The quality and sophistication of their work improved steadily throughout the year and will no doubt continue to get even better as we become much more familiar with best practice in the BP room. Big Picture will continue in 2017 with about 35 students from Years 9 and 10 having been accepted into the program.

A huge thank you to the parents who have supported staff and students during this initial establishment phase of BP during 2016 – without your continued involvement in your child’s learning we would not be as successful as we have been thus far. More to come – onwards and upwards! Lastly, the success of the BP program in 2016 would not have been possible without the untiring and extraordinary efforts of the Advisory teachers – Calen Robinson (9) and Rob Morris (10). I know the students have thanked you both individually, but publicly let me say that you have both done a sterling job navigating the new way forward for us. We look forward to seeing Rob M continuing in his role with the new Year 9 class and we welcome Rosanna Thompson and Stuart Gilmore to the fold to join us in 2017. Good-bye to Calen as he departs for other things – Thank you for your work – always diligent, determined and inspired - you will be missed!



Rob Hamburger

ACE SCIENCE 2016

This has been our biggest and most successful year yet in ACE Science at Melrose. Alongside the core teaching programme, students were given opportunities not seen elsewhere in Australia. These opportunities are based on the philosophy of connecting high school students with contemporary science and engineering. As you’ll see from the examples below, Melrose now has strong and extensive partnerships with academia and industry with the single goal of inspiring our students in Science.

Science Seminars

The original and still central feature of ACE Science is inviting science and engineering specialists into the classroom. This breaks down the stereotypes of science, exposing students to some of the country’s leading researchers. This year nearly 50 speakers attended the school, ranging from PhD students to some of the local universities’ senior research managers. We covered just about every branch of science, inspiring students to explore their own favourite science.

Partnerships

ACE Science continues to build links with the scientific and wider community. Not only do we regularly liaise with over a hundred scientists and engineers, but the public is getting on board as well. This year, amongst other things, we received donations of telescopes, magnetometers (in need of restoration), glassware and a wide screen TV from an anonymous donor. These contributions are in recognition of the efficacy of the programme.

Capital Pathology again partnered with ACE Science to present a two-session workshop for Year 9 students.

Thanks to Melanie McKay who presented a lecture, followed by extensive practical work examining the world of pathogens and other medical conditions. Capital Pathology also donated microscopes to the Science Education Centre.

A recent success story has been the restoration of disused telescopes donated to the school. Students in the Astronomy course learned valuable skills bringing these telescopes back to life. The longer-term goal is to create a library of such telescopes that students can borrow from to see if astronomy is for them, rather than asking Mum and Dad for a \$600 instrument that may end up in the garage. Students interested in borrowing a telescope should contact Mr Mac.

Science Tours

It's not enough to get science into the classroom; we need to get the kids to the science. This year, students from Year 8 to 10 were taken on a dozen Science Tours covering a wide range of sciences. Year 8's engaged in earth sciences, ecology, botany and waste management. Year 9 were hosted by Icon Water, Veolia's Woodlawn Bioreactor, Infigen Energy's Woodlawn Windfarm, Geoscience Australia and, in our latest addition, a spectacular visit to UNSW Canberra's Engineering facilities. Year 10 students visited Pharmacy at University of Canberra, and ANU's Research Schools of Chemistry, Biology and Physics, Astronomy and Astrophysics, and Earth Sciences. At each of these sites, students engaged in experiences and lectures to heighten their awareness of tertiary education and research facilities.

Science Mentors

The flagship of Science at Melrose is ACE Science Mentors. This programme partners students with a researcher in a field of the student's particular interest. Science Mentors began six years ago with just a few students who produced reports only a few pages long. This year, 25 students from Melrose, Alfred Deakin High School, and Canberra College received certificates for their work in a dazzling range of sciences and engineering. Fields included pharmacy, medical imaging, astronomy, rocket engineering, aeronautical engineering, sports science, palaeontology, seismology, physics and nanotechnology.

Most of the projects can be carried out using the facilities of the ACE Science Education Centre at the school. Sometimes the nature of the investigation requires specialist equipment, however, and so led to student placements at tertiary institutions, including UC Genetics and Pharmacy, and ANU's Research School of Biology.

What's stunning is the length, complexity and sophistication of the reports these teenagers are producing. A typical report is between 3000 and 5000 words, though the longest this year was just shy of 9000 words. Each report is thoroughly referenced and refereed. Students keep coming, too: six students have already registered their interest for 2017 knowing that the amount of work required is far above that needed to pass high school science.

MSATT

The biggest news, however, was the completion of the McNamara-Saunders Astronomical Teaching Telescope at Mount Stromlo Observatory. Designed and built to meet the needs of Science Mentors projects in astronomy, MSATT was funded by private donations of cash, equipment, expertise and labour, and represents an \$80 000 facility. MSATT is now receiving students from the ACT region. MSATT is currently being commissioned and will be ready for student projects from January 2017.

In addition to providing a facility for specific student projects, MSATT will also be regularly used for Field Nights from Melrose High's own Astronomy course, as well as hosting visits by local and interstate visitors such as the National Youth Science Forum, Space Camp, National Science Teachers' Summer School, and specialist groups from ACT schools and colleges.

MOUNT STROMLO SPACE AND STEM EDUCATION CENTRE, MSEC

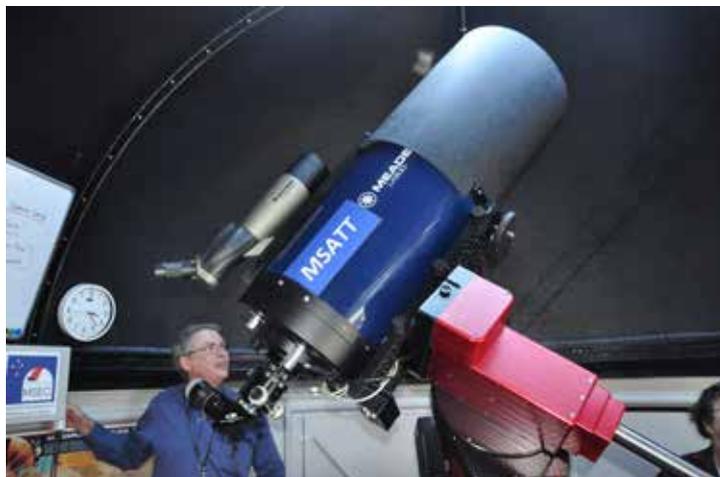
The completion of MSATT means there are now two related science teaching facilities: the Science Education Centre at Melrose High School and MSATT at Mount Stromlo Observatory. In order to streamline the administration of the two sites, it was decided to create the Mount Stromlo Space and STEM Education Centre, MSEC. MSEC is based at Melrose High School, but also manages MSATT at Mount Stromlo. MSEC has an advisory board with representatives from the key partners of the Education Directorate, ANU's Research School of Astronomy and Astrophysics, University of Canberra, Inspiring Australia and an independent mem-

ber. MSEC was successful in securing \$55000 in funding this year in partnership with Inspiring Australia, ensuring the operation of teaching programmes like those described here for at least another two years. With so much advancement this year, Melrose clearly has a winning formula for Science. We look forward to an even more exciting year of science in 2017.

Geoff McNamara

MSEC

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The Melrose Magazine

Magazine Production is a Year 9 & 10 self-directed elective class where students create media products that incorporate text using different journalistic writing styles and graphics to make dynamic media and multi-media products that incorporate the four main elements of design: Alignment, Repetition, Proximity and Contrast.

Students are encouraged to engage in all aspects of design layout and content creation. They decide on the subject matter, write the text, take photos and design the page layout to ensure that all the work is original and relevant to their target audience. Students in the class work both independently and cohesively as a team to produce a polished and professional full colour magazine. This promotes the development of effective collaboration, professional relationships, communication and collective problem solving.

The 21st Century Fluencies are used throughout the production of the magazine. Most recently, the focus has been on the five A's of Information Fluency:

Ask - This is when they ask themselves 'What do I want to write about?', 'Who is my audience and why is this relevant to them?' and 'What do I need to know to be able to create the content and design an appropriate layout?'

Acquire - This is where they research their chosen topic and acquire the skills and knowledge needed to produce an engaging media product.

Analyse - They then examine the content they have created. Think of this as the proofreading and editing process.

Apply - This is where they practically apply all the knowledge and skills gained through the Ask, Acquire and Analyse stages to create a draft media product.

Assess - The fifth stage is about thoroughly and critically revisiting both the product and the process. This is also the stage where they get to go back and revisit any and all of the other stages to refine and enhance the work they have created,



both in content and design.

Magazine Production is a dynamic class that provides students the opportunity to learn how to be more self-directed and gain new skills in different journalistic writing styles, photography, digital image manipulation, designing, proofreading and editing.

Every student is required to produce one polished media product each term. They are encouraged to write about something they are passionate about and that interests them. This empowers students to take greater ownership of their work and be proud of what they have accomplished. It also facilitates real world learning and promotes the development of essential skills required to be successful professional participants of the 21st Century: Problem Solving, Communication, Critical/Analytical Thinking, Creativity and Collaboration.

To download a copy of the Melrose Magazine 2016 please click on the link on the school's website or on the school's Facebook page. If anyone is interested in choosing Magazine Production as an elective in 2017 then please contact Ryan Kay at ryan.kay@ed.act.edu.au

Jaquinn Martin (Magazine Production Student)

Happy Holidays From the Melrose High School Staff

