Exciting New STEM Initiatives at Avondale School in 2019 and Beyond

Science, technology, engineering and mathematics are the most common disciplines linked to the STEM acronym within the school sector. As well as working scientifically, STEM involves students working mathematically, working digitally or technologically, and working like an engineer. STEM has come to mean the integration of these disciplines, either in any dyad, triad or ideally all four disciplines. In other words, the goal is to see students working in an integrative way.

There is general agreement about the importance of STEM education in Australia and reports cite the need for a workforce with STEM skills to drive economic prosperity and the contribution that STEM can make in solving the ‘problems’ of the world via science and technology.

Set against Australia’s desire for strong, comprehensive and equitable STEM education is evidence that our education systems are not up to the challenge. Recent results on international assessments show a continuing decline in performance by Australian students. While the curriculum is being modified in an attempt to address changes in STEM, including the introduction of a Technologies curriculum, there is concern that the Australian Curriculum is packaged in discrete disciplines and is not future-facing. In order to address this challenge, Avondale School Secondary Campus has undergone a restructure which will be implemented from the beginning of next year. From 2019, our Secondary Science, Technologies and Mathematics departments will amalgamate into a single STEM Hub. This new structure will support greater opportunities for integration of the STEM disciplines through both enquiry based learning and project based learning.

As a result of implementing the curriculum described above, we expect to see our students significantly more engaged in 21st century learning and a greater number of students selecting Stage 6 Science courses, Advanced Mathematics and Extension Mathematics courses.

Late last week our new Secondary School STEM Hub received the exciting news that we have been selected as one of the Partner Schools for the 2019 STEM Teacher Enrichment Academy program, run by Sydney University. This program will involve Avondale School partnering with the STEM Teacher Enrichment Academy to further plan and develop Avondale School’s STEM program and involves our Secondary STEM teachers in research backed professional development and support from STEM Academy mentors.

We are very excited about these changes and will gain input from parents and students as we embark on this new STEM initiative throughout 2019.

Anthony Hibbard
Secondary Mathematics Coordinator
Term 4 Sport Uniform
Kindy - Year 2 – Sport Uniform on Mondays.
Years 3 & 4 – Sport Uniform on Wednesdays.
Years 5 & 6 – Sport Uniform on Fridays.

Years 3-6 Swimming Program
Years 3 & 4 - Wednesdays
Year 3 depart at 1.15pm, return at 2.25pm
Year 4 depart at 1.50pm, return at 3.00pm
Years 5 & 6 - Fridays
Year 5 depart at 1.15pm, return at 2.25pm
Year 6 depart at 1.50pm, return at 3.00pm

Kindy-Year 2 Learn to Swim Program
November 12 – November 23
All students in Kindy, Years 1 and 2 will participate in a Learn to Swim Program at Morisset Heated Pool from Monday, November 12 until Friday, November 23. Students are required to bring their clearly named swimmers and towel (goggles are optional) each day for the two-week program.

CLASS
4C Trends in International Mathematics and Science Study (TIMSS)
Tuesday, November 6
Mr Clark’s Year 4 class has been selected to take part in the Trends in International Mathematics and Science Study (TIMSS), which will take place on Tuesday, November 6. TIMSS is an important educational research project investigating student achievement in Mathematics and Science. More than 60 countries, including Australia, are participating in this study. TIMSS is an important activity to keep us, as parents and citizens, informed about how our students in Australia are performing in comparison to their peers in other countries and to compare programs of study and teaching practices. We will be able to obtain current national and international information which will help improve the teaching and learning of mathematics and science in our country. The students will do an assessment in Mathematics and Science and complete a questionnaire about their experiences at home and school. There is no need for students to study specifically for the assessment as it will not affect individual student’s grades or progress in school. All data will be kept strictly confidential and no individual student or school will be identified in published data or reports.

SPORT
Knox Grammar Chess
Last Sunday our three top chess players, Kylan M, Rose J and Ryan M had the opportunity to play in the Sydney Academy of Chess Schools Chess Challenge at the Knox Grammar School. Congratulations for placing 34th out of 175 teams!

HRIS Junior Basketball
Last Thursday, selected Years 3 and 4 students represented the school at the HRIS Junior Basketball Gala Day. Eleven schools participated in the event with our Boys Team placing 2nd and our Girls Team 4th. Congratulations for a fantastic day, great sportsmanship and very good results!

HRIS Chess
Avondale School hosted the annual HRIS Chess Competition last Friday. Thirteen schools represented in 64 teams making a total of 256 students all playing chess at the one time! A wonderful day was had by all with teamwork and great sportsmanship being shown. Lots of hand shaking and checkmating! Congratulations to Newcastle Grammar School A Team who won the Open Division with a score of 26. Runners-up went to Lakes Grammar Anglican School A Team with a score of 19 and then followed close behind with a score of 17 our Avondale School Knights Team. Congratulations to Lakes Grammar Anglican School 1 team on a score of 22.5 and runners-up Avondale School Rookies C team on 20.5
SPORT

Sport Achievement
Liam B in Year 9 came 2nd in State for High Jump recently. He jumped 1.88m.
Congratulations Liam!

HRIS Tennis Success
The Junior Boys Tennis Squad played in the semi finals of the HRIS Junior Tennis Tournament held at Broadmeadow in the first week of term. We congratulate our squad, captained by Tyson H, for their fourth placing in this very competitive competition. All four of our young men (Tyson H, Ethan M, Jayden M and Luke L) played fantastically well, each winning the majority of their matches against their opponents from the eleven other schools who played. Luke (who played in the tournament for the first time) when asked, claimed, “the day was sooo awesome!” All participants had much fun!

CLASS

Year 11 Food Tech Excursion
This week Year 11 Food Tech visited the Tailor-Made Fish Farm and Cookabarra Restaurant near Nelson’s Bay to view the ecologically sustainable food production methods they have developed from ‘Paddock (pond) to Plate’. The organisation grows barramundi to plate size and uses the waste water and products to feed their hydroponic vegetables. The fish and the vegetables are used in their restaurant as well as supplying markets in Newcastle and Sydney. It was beautiful weather and the students were entertained by the fish feeding with no fingers harmed in the process.

Y9 Bungonia Camp
Last week Year 9 packed up, headed to Bungonia and set up camp amongst the rocks. On the first night half the group went caving while the others went on a short night hike. The temperature dropped down to below 6 degrees! An early rise with the birds and sun was a rude awakening for some. We got ready for our big walk and set off across the ridge, down the steep track to the Shoalhaven River, a quick dip for some brave souls and then lunch. We hiked along Bungonia Creek and then up and over the boulders. The echidna and wombat sightings were cool and the red belly black snakes added excitement. This led us to the bottom of the Efllux, which is the start of the assent out of the gorge. The fast group started racing to the top with Ethan M claiming the title of ‘King of the Mountain’ (setting a new blistering record of 15 minutes) and Lara H the ‘Queen of the Mountain’. On Wednesday and Thursday, groups rotated around different activities and then we went caving at night. A big thank you to the staff, parents and the Avondale College Outdoor Rec students who assisted. Their help was invaluable. Each staff member took a worship focusing on personal challenges and how they managed to overcome. We were all challenged by different activities and overcame them through teamwork and perseverance. These are valuable throughout life in helping to build resilience, which was the main focus of the camp and our PDHPE topic this term. Thank you to Year 9 students for making this such a great week.
LIBRARY

K-2 Library Borrowing
In previous years library borrowing/returning really drops off when infant swimming commences. Some library books even become wet from being in the same bag as swimmers and towels! Therefore, K-2 library borrowing will finish one week earlier than the rest of the Primary School with K-2 library books being returned in Week 4 rather than in Week 5. Library classes will still continue to run as normal with other activities rather than borrowing.

K-6 Library Year-End Activities
The end of the school year is fast approaching and lots of exciting activities will be happening in the library.

Because Term 4 is only an eight week term each of the following activities has had to be moved a week earlier in the term than usual.

<table>
<thead>
<tr>
<th>Week 4 (ending November 9)</th>
<th>Return K-2 student library books (due to daily swimming being held in Weeks 5 &amp; 6).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 5 (ending November 16)</td>
<td>Return Year 3-6 student library books. Term 4 prizes and library party invitations awarded.</td>
</tr>
<tr>
<td>Week 6 (ending November 23)</td>
<td>Library parties for perfect borrowers. Week 7 (ending November 30) Library parties for perfect borrowers. Return all student Year 4 class library books. Return all Parent library books. There are prizes for the first class in each Stage to return all their library books!</td>
</tr>
</tbody>
</table>

Busy Busy Busy
It is a busy time of year in the iCentre at the moment. We have had lots of Year 12 students studying for their HSC exams in our group study rooms and at individual desks. Final assignments are being printed and submitted and the younger years are also starting to prepare for their upcoming exams. We have also had Kindy and Year 7 Orientation nights and Year 11 Parent Teacher Night in the iCentre this week so it has been a constant flow of activity. Don’t forget our excellent parent library which is still available for a few more weeks before borrowing ceases for the year.

Book Club
A reminder that the Book Club closing date is today so make sure you have your orders in! Remember, if you are planning to give the great gift of books at Christmas, we are happy to keep your orders aside and contact you to collect them.

ALL SCHOOL

FEATURED ARTIST

JUSTINE CLARKE

COMMUNITY CHRISTMAS CAROLS | 2 DECEMBER 2018

Private Music Tutors
Are you interested in having music lessons? We have many great tutors and instruments available to learn on. Please contact tutors directly to arrange lesson times.

Piano
Kylie Stacey (Simply Music, AMEB, traditional) / 0409 939 302
Angela Miller (Simply Music) / 0421 464 797
Cybèle Coutet (AMEB) / 0423 455 977
Jan Hughes / 4977 2037
Henry Higgins / 0490 0404 308

Voice
Cybèle Coutet (AMEB) / 0423 455 977

Strings
Henry Higgins (cello) / 0490 040 308
Esther Albert (cello / violin / double bass) / 0439 420 661

Woodwinds
Emma Jones (flute) / 0432 925 199
Fred Cracknell (saxophone / clarinet) / 0404 082 151

Brass
Fred Cracknell / 0404 082 151
Anna Howard (trumpet) / 0430 106 953

Guitar
Jake Bisognin / 0400 389 612
Toby Zeuschner / 0405 405 131
Henry Higgins / 0490 0404 308
Garry Lawler (group lessons / ukulele) / 0438 608 180

Drums
James Dennett / 0401 549 084

Avendale School Newsletter

We value ...

Integrity