

THE REGIONAL ENGAGEMENT ENTERPRISE



What is THE REGIONAL ENGAGEMENT ENTERPRISE?

The Regional Engagement Enterprise (TREE) is a Kinross Wolaroi School (KWS) initiative to provide contextual, cross-curricular, community-based learning experiences for all students from Kindergarten to Year 12.

The initiative engages our students with relevant, contextual projects from our local community. TREE contextualises the curric ulum to show students the relevance of living regionally, demonstrates the importance of a well rounded education and breaks down existing preconceptions.

As part of the TREE initiative, all students of the School are involved in student-led research and development projects each year. For students in the Prep School, each year level has their own project and is introduced to TREE through hands on activities and excursions. In the Senior School, every subject has at least one project and student involvement varies greatly depending on each student's interests, abilities and the project itself. A small number of prized and unique industry internships are offered to Year 10 students who progress through the industry standard application process.

It is hoped that TREE will help to showcase real life opportunities and assist students to see how what they are learning in the classroom will be put into practice outside of School. 'Future Proofing' our student body by teaching transferable skills is vitally important. Students of today need to be able to adapt to change, have an entrepreneurial spirit and be excellent communicators if they are to succeed in an ever-changing and developing workforce.

KWS aims to set a new standard for holistic, contextual learning through TREE. We believe that this initiative can strengthen our bond with our local community and create endless opportunities for our students well into the future.



"Future Proofing our student body by teaching transferable skills is vitally important"

MHS



Example projects ACROSS THE CURRICULUM...

YEAR 1 PADDOCK TO PLATE

Students in Year 1 have been exploring the Paddock to Plate concept for Apple and Cherry production.

As part of the project, our students have been out and about learning first-hand what is involved in producing quality fruit in the Central West. The first visit was to the Orange Regional Museum to learn about the equipment and stages involved in fruit production. Students were then welcomed to Balmoral Orchard where they learned the reasons why apples are suited to our region and how apples are graded, packaged and where they finally end up. The next stop was Caernarvon (BiteRiot) where students explored the magnificent packing facility. Our Year 1 were introduced to new technology involving cameras that take 300 pictures of the fruit every second to decide where they will end up on the production chain. Students sampled cherry juice and learned about export, packaging and how many people it takes to produce cherries from paddock to plate.

YEAR 3 MT CANOBOLAS 'THEN AND NOW' AND MODELS OF THE MOUNTAIN

Year 3 have been exploring the history and heritage of Mount Canobolas. First stop for our explorers was Borenore Caves where students learned about the Indigenous heritage of the site and the cave formation following the last volcanic eruption. Students also visited Swinging Bridge Vineyard to learn about viticulture related agri-tourism on the mountain. They learnt about pruning, collected soil samples and calculated the mathematics involved in grape production. A stop off at Mandagery Creek Venison gave the students the chance to learn about venison farming. The students observed deer in the yards, measured the heights of the unusually large fences and investigated the export market for venison. Back at school, Year 3 had the chance to get creative and build their own 'Models of the Mountain' following their exploratory visit to Mount Canobolas.

"TREE has allowed learning to come alive at KWS. Students now have the opportunity to make connections between learning and life." SUE-ANN GAVIN

HEAD OF SOCIAL SCIENCES

YEAR 5 SUSTAINABLE GREENHOUSE

Year 5 have built a sustainable greenhouse from plastic bottles they collected in the community. The design of the greenhouse was decided following a class project to create their own models using craft materials. In total the students collected over 1500 bottles that all needed to be cut to length so they could fit along the dowel that would make up the walls of the greenhouse. The students decided not to have bottles on the roof, as was first thought, as they would like to have a guttering system to collect water for 'vege central' next door. Two teams of builders, one from each class, worked with the School's maintenance team to coordinate the design and construction of the framework. Students also painted the structure in neutral tones to match the surrounding trees. A weather station will shortly be installed so that the students can measure the efficiency of the greenhouse in maintaining a thermal mass.



THE ARCHIBULL

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The Archibull Prize is a world renowned program designed to get students exploring the role agriculture plays in the health, wealth and happiness of Australians and many other people around the world. KWS was chosen as one of 30 schools to participate in the Archibull Prize Competition for 2018 with the Wool Industry as their focus area to investigate. This project has been worked on across a range of subjects

Section!

with the aim of equipping students with knowledge about the production of the food they eat, fibres they use and the environment they live in. The School was provided with a life sized fibreglass cow, 'Archie' (pictured below) to create an artwork on or use as the subject of an artwork focussing on the theme 'Feeding, clothing and powering a hungry nation is a shared responsibility'.



YEAR 8 AMAZING FARM RACE

Year 8 Mathematics classes spent the last two weeks participating in the 'Amazing Farm Race'. Like the game show, the students receive an envelope each day with a series of mathematical challenges based on the information they gleaned from a visit to the school's newest farm (Windermere) and from analysing an aerial map on avenza maps. Two of the classes worked with local surveyor, Matt Forsyth to calculate the size of the dam using a theodolite and the longest fence line using GPS trackers. The students then had to calculate rates, ratios, areas, perimeters and volumes before presenting to their peers on how best to stock the farm. The winning teams expertly argued for water troughs, diversified income streams (fruit and vegetables for the boarders) and reasoned stocking rates (of merino sheep and angus cattle).

YEAR 9 SENSORS

Year 9 have been building soil sensors as part of a collaboration with local telemetry company Porosity. The students began by using microbits and scratch to code a rudimentary soil probe. They programmed the sensor to read the voltage between two nails placed into the soil. Following this, they built gypsum sensors to see how increasing the volume of water in dry sand affected the readings taken. Students then set up a weather station at Windermere to feed information to the school via Porosity's website. Students will also be learning how to use arduinos to build more advanced sensors before programming their own data logger to collect readings which can be remotely accessed to gain real-time weather data. They will also design a website to show this data, linking it into the FROG dashboard so that it can be accessed by the school and the farm manager.



YEAR 10 RURAL MENTAL HEALTH

As part of their Year 10 course, our drama students explored the issue of regional and rural mental health. This is a very topical subject, particularly for our boarding community of whom many have been sadly touched by farmer suicide.

During the project the students had a tutorial from local filmmaker Jim Gowing of Awe Vision on how to imagine, film and edit the necessary material for a short feature film. They also had a brilliant talk from and discussion with Rural Adversity Mental Health Program (RAMPH) consultant Di Gill from Canowindra. Di explained the warning signs, triggers, programs available to help and actions people living in a regional area can take to ensure improved wellbeing.

The students produced some brilliant, albeit confronting, short documentaries; often using images and stories of home.

> Use this QR Code to view some of the student's short documentaries.



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TREE Internships

Each year, TREE offers a small number of unique industry internships to students in Year 10. The students attend the business for half a day a week for 20 weeks. To secure a place the students must pass an industry standard application process, including a purposeful cover letter, interview and pitch to their allotted business. Once there, the students work on a specific project that they later communicate back to the school community.





Harriet O'Brien, Year 11 boarding student from Quambone made the most of her internship at Adagio Mills.

Hattie described her internship as a great opportunity that gave her insight into the workforce and industry. During her internship, Hattie had the opportunity to produce her own Alpaca fleece, putting it through a different process every week from washing, to dehairing, carding, pin-drafting, spinning yarn and then finally spinning it into balls. Hattie learnt valuable workplace skills and gained extensive knowledge of the wool milling process. Ben Gillham, Year 11 boarding student from Orange challenged himself as an engineer at MSM Milling.

Ben worked with MSM representatives to develop a new part that slowed the passage of seed in one of the many machines of the refinery. Ben valued the time spent with passionate people, developed his communication skills and enjoyed learning outside of the classroom while on internship. He has spoken enthusiastically with the current Year 10s regarding applying to be involved.



- Windermere

ENDLESS POSSIBILITIES AND ENORMOUS POTENTIAL

There is much excitement from staff and students about KWS's latest purchase of Windermere Farm and the opportunities that now lie literally at the School's doorstep. It is hoped that all subjects studied at KWS will have some level of engagement with the farm and its surrounding community. Examples of Windermere's usage thus far include: a mapping project by Year 8 Geography with the Department of Primary Industries; Year 10 Agriculture (weather permitting) have stock in the paddocks; Year 8 Mathematics have explored the property and calculated areas for their unit, 'The Amazing Farm Race'; it's been analysed by Year 11 Biology's ecological depth study and fenced by Year 10 as part of the living skills program. The Livestock Team will use the farm to run their own sheep flock; students will have the opportunity to take on bee-keeping and honey making; there will be sheep genetics projects including artificial insemination; and Geography students will study real-life salinity management and rehabilitation on site.









TREE Co-curricular Opportunities

TREE currently provides three co-curricular options for students in Years 7-12. The cattle team and sheep team collectively make up our livestock team. Whilst showing at national events (Dubbo, Parkes, Molong, Scone and Wingham to name a few) is an important aspect, we also attempt to holistically educate our students about the broadness of the respective industries. This includes visits to wool sales, shearing classes, junior judging workshops together with visits to studs, feedlots and the dairy industry. Additionally, we offer a Farmers Market Team for students from

Years 8-11. These students create their own business for six months selling produce from our market gardens and agriculture paddocks at community events. Last year, the students reared pigs that they had slaughtered before butchering them and making sausages, smoked bacon and Christmas hams with Stefan Birmili from Cured, a local small goods producer. They reinvested the money from these sales into planting vegetables in their market garden and launched 'Dinner in a Bag' at the Orange Farmers market. Homemade pasta, sauce and vegetables all for the princely sum of \$20!

Use this QR Code with your mobile device to learn about the co-curricular opportunities available at KWS.

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Boarding students

TREE PLANTING & FENCING

Boarding students from Year 7 and 8 headed to our Leurella property in Blayney to plant 240 trees as part of our LLS grant secured in 2017. The students worked their socks off planting, mulching, watering and fencing the saplings into a 300m tree line. This tree line was requested by the farm steering committee to act as a windbreak. Hopefully these students can return in the years to come to reap the fruits of their labour.

COOKING CLASSES

Boarding students have the opportunity to attend varied workshops led by the TREE team in our own hospitality kitchen. Events so far this year have included a masterchef mysTREE box challenge, a gourmet burger competition and a cooking 101 workshop.

AGRICULTURE CLUB

Agriculture Club runs every Monday and Friday during summer and spring at our Wolaroi and PLC plots respectively. The students are involved in building beds for planting, cultivating, harvesting and cooking a wide variety of produce from our market gardens.



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