

ARCHIBULL PRIZE CASE-STUDY: EMBEDDING AGRICULTURE IN THE GEOGRAPHY CURRICULUM



MEET RAY HOWELLS, GEOGRAPHY TEACHER AT PYMBLE LADIES' COLLEGE, WHO HAS INTEGRATED 'ECOSYSTEM OF EXPERTISE' INTO THE STAGE 5 GEOGRAPHY PROGRAM

Geography is increasingly being used in The Archibull Prize to teach agriculture by surrounding the school with an Ecosystem of Expertise through:

- Building long term partnerships with best practice farms the students investigate and report on.
- Working with our Young Farming Champions to get an understanding of how our food travels from paddock to plate and the diversity of people and roles that feed and clothe us, supply us with ecosystem services and renewable energy.







Today we visit Pymble Ladies' College (PLC) to see how they make the Ecosystem of Expertise work in practice.

Geography teacher Ray Howells grew up "with the smell of cow manure" in an English country village. He went onto teach and lead the geography department in an inner-city London school where some students had never visited a farm. But today at Pymble Ladies' College, many of his pupils, although predominantly from Sydney, have rural connections.

"The sense of community at the College is really strong, one day a student was talking about her parent's farm," says Ray. "I thought it would be nice to foster this interest in agriculture in class, so I sent an email out to all of the past boarding families and friends who I thought might be supportive of this."

In response to Ray's call-out to the wider Pymble community, a flourishing relationship has developed with Blantyre Farms in Young, southwest NSW, and family business Montrose Dairy in southern VIC. The students involved decided to explore how to address hunger and food insecurity through 'the Archies'. Through Covid-19, the use of technology and digital resources has made learning accessible and enabled the Archibull program to continue.

Blantyre Farms is a mixed farming operation including sheep, cattle, cropping and pigs.





"I am fortunate to be a Pymble girl and my daughter is also a boarder at Pymble so when Ray put out the call for parents [in agriculture] to be involved I eagerly answered," says Edwina Beveridge from Blantyre Farms. "Feeding the world is a noble profession and I hope a visit to our farms will challenge the student's perceptions of sustainability and agriculture. Our farm is not what you would expect."

Indeed, Blantyre can show students examples of cutting-edge technology. With 2000 sows on the farms this means they have about 20,000 pigs on hand at any time, but in an innovative solution the farm captures methane from the pig manure and turns it into electricity.

"This massively reduces our carbon footprint and allows us to generate carbon credits. We were the second project registered under the CFI [Carbon Farming Initiative] and the first farm. I like to say we are the first carbon farm in Australia and I am yet to be challenged on this!

"I grew up on a farm but showed no particular interest until I was 24. I hope this might show the students it doesn't matter if you grew up on a farm or whether your enthusiasm started later, ag is a cracking career," says Edwina.















Another ex-PLC student to answer Ray's call was Gillian Hayman from Montrose Dairy.

"As a student I was always eager to understand how what I was learning related to the real world and I am sure there are many students who learn in this way. The opportunity to learn the theory in the classroom with Ray and then back up the learning with Montrose and Blantyre Farms is a positive step and will no doubt lead to many other linkages for students. I hope it will open their minds and perhaps break down some long-held perceptions about who a farmer is and how they go about their business in these modern times," says Gillian.





"Unless young people are introduced to rural areas and farming through family connections or through their schooling they will not discover the possibilities open to them and there are so many exciting career opportunities across all aspects of agriculture. There are jobs from the research in labs and in the field to hands-on farming; from technology, greenhouse gas emissions, soil, plant and animal management, environment and biodiversity to nutrition, community development and economics. Even if people do not choose a career in ag, it's so important to understand food production and land management as a consumer."

Ray echoes Gillian's sentiments.

"We really want to make Year Nine and Ten Geography interesting and relatable. If the girls decide not to continue the subject in Stage 6 that's fine, there are so many avenues and opportunities available to choose from. I'm confident we've given them a comprehensive snapshot of the big issues we face in Australia and the world, which is my objective."

Helping students to make those decisions is Tayla Field and her network of fellow Young Farming Champions. Tayla, who works in horticulture, is assigned to PLC through The Archibull Prize.

"The students were able to provide a list of questions which was a great starting point, however I noticed a lot of these were in areas beyond horticulture so I reached out to the YFC asking for support. Marlee Langfield provided insights into agricultural yield from crops, Anika Molesworth gave her thoughts on the future of farming in Australia and Emma Ayliffe commented on the role of water in Australia's dry climate. Other members of the YFC team came back with videos and we were able to create a range of online resources specifically for the PLC students," says Tayla.



Screenshots of the PLC Virtual Classroom created to support the students during COVID lockdown

Having access to the Young Farming Champions network through Tayla and having access to two operating farms means PLC is using the Ecosystem of Expertise to its highest degree, and the subject of geography has made the pathway clearer.



Tayla has a long history as a YFC of inspiring students to consider careers in agriculture. See case study here

Ray sees this of enormous benefit to both his students and to agriculture.

"We have this very stereotypical image in the media of what agriculture is, like what you might see on 'Farmer Wants a Wife. Opportunities like The Archibull Prize, Kreative Koalas, and other initiatives outside the classroom can help broaden this and show agriculture as a cutting-edge industry that is undergoing a new wave of technological revolution. With this paradigm shift, there are exciting opportunities to encourage, educate and upskill the next generation to work in innovative and widerange fields of 21st Century agriculture."

This concludes our 3 Part Series that showcases the opportunities for work integrated learning and how to embed the world of agriculture into the wider school curriculum.