



WESTERN AUSTRALIAN SCHOOL TRAINS STUDENTS FOR SUSTAINABLE LIFE ON THE LAND

Mount Barker Community College lies in the agricultural region of Western Australia, 360 kilometres south-east of Perth. Catering for kindergarten to Year 12 students, the rural college's commitment to AuSSI is demonstrated through its sustainability teachings which are closely linked to the management of the school's working farm.

The 237 hectare farm means that the college's water needs are greater than those of other schools. Water is needed to maintain the farm's poultry shed, horticulture area, aquaculture enterprise and nine livestock troughs.

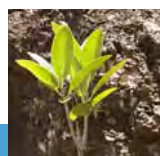
The school contributes to water efficiency by collecting rainwater from 640 square metres of roofing on farm buildings. The water is stored in two community-donated tanks, which hold 860 000 litres, and is used to water the school's oval and vineyard.

The college has the capacity to collect a further 875 000 litres a year in its two dams. This is an important environmental resource and cost saving measure given the region's average annual rainfall is 750 millimetres.

One of the dams is used as a natural filtration system. Students plant reeds to filter the water and learn important scientific lessons by monitoring the wetland's ecosystem, macro-invertebrates and water quality.

Teaching opportunities from practical activities are highlighted and integrated across the college's curriculum, not only to teach the importance of environmental sustainability, but to encourage students to understand the connections between environmental, social and economic systems. The school has established a sustainability committee and a sustainability policy, and has provided training for staff through professional learning programs such as Waste Wise and Water Wise.

The school's stud farm of Murray grey cattle teaches Year 10, 11 and 12 students how to manage a sustainable bull breeding enterprise. Students learn about economics and how the costs of various feed lots and diets compare with earnings from cattle sales. Students record weight, identify breeds and transfer embryos from studs to commercial cows.



Senior viticulture students grow chardonnay and shiraz wine grapes. They carry out pruning, picking and wine label design and distribute the grapes to commercial wineries for sale. The sales provide funding for the school and the farm. Senior biology students are working with the University of Western Australia in conjunction with the world seed banks to study the long term viability of chick peas in an arid climate.

Through these practical exercises, students learn about planning and managing for change towards sustainability, and see first hand the employment opportunities available in fields related to sustainable agricultural management. Students are able to complete a range of certificates at the college including Certificates I and II in Rural Operation, Certificate I in Food Processing (Viticulture) and Certificate I in Aquaculture. All graduates leave the college with sustainable living experience.

Other AuSSI achievements

Water efficiency

The college has installed wider guttering to catch more rainwater from the roof.

Waste reduction

The college has a paper recycling program, compost bins and a worm farm.

Partnering with the community

The college has partnered with groups such as Landcare, the Oyster Harbour Catchment Group, the Shire of Plantagenet and the Western Australian Department of Agriculture and Food.

Biodiversity conservation

Students planted 1000 native trees and perennial grasses to tackle salinity and lower the water table on the farm paddocks. This revegetation also serves as a windbreak and habitat for native fauna.

Energy efficiency

Years 3 to 6 are working on a submission for solar panels for their building. Plans are under way to install a solar pump on the dam to fill tanks during the summer. New classrooms have been constructed to maximise natural light and include insulation, skylights and light timers.

Health and well-being

Students harvest their own vegetables and take them home.

