

Farmhand at 'Condo' High School

By Shane Byrne, October 2021

Students at Condobolin High School, in western New South Wales, were introduced to a new helper recently, they spent two terms experimenting with the Digital Farmhand robot.



The Digital Farmhand on-site at Condobolin High School. Used with permission.

Michael Forrai, Software Team Lead at [Agerris](#), The University of Sydney start-up that supplied the Digital Farmhand, said: ***"Condobolin High students and Anne Earney (Head of Agriculture at the school) were great to work with. The students showed a real interest in learning about robotics and how the Digital Farmhand was contributing to the future of agriculture."***

"The purpose of the STEM Program was to introduce regional students to agricultural robotics and promote agriculture as an exciting career option through real life problem-based learning activities that are drawn from agricultural applications" Mr Forrai said.



The Digital Farmhand autohitch. Used with permission.



The Digital Farmhand chippy. Used with permission.



The Digital Farmhand solar panel. Used with permission.

The robot is designed to become a farmer's digital chippy, plant adviser, sprayer, mapper, yield estimator and soon to come, harvester. Many students would be happy just using this range of features, but the Condobolin High Agriculture students had other ideas.

The students were incredibly creative when it came to creating additions for the Digital Farmhand and thinking of novel uses, such as designing and manufacturing a bracket to attach one of their own seeders. Not content with just one new application for the robot, they were also able to control it with an app using an iPad and even used it to herd animals from one area of the school to another.

This sort of ingenuity is exactly what the Agerris team were hoping for.

Ever mindful of the inherent risk of working with any farm machinery, the Agerris team was able to monitor the use of the Farmhand from their offices in Sydney. They could track exactly where it was, thanks to the inbuilt GPS, determine if the solar batteries needed recharging and even see what plants the robot was assessing — all in real time.



The engineers could also limit such things as the top speed that the robot would operate at while at the school. Only time will tell if robots like the Digital Farmhand will mean that kelpies across the country can join their best mate relaxing on the verandah a few hours early at the end of the day.