



Timboon P-12 School: Timboon Agriculture Project (TAP)

www.timboonp12.vic.edu.au/page/206

Innovation

Beginning in 2012, Timboon Agriculture Project (TAP) is a partnership between Timboon P-12 school and WestVic Dairy, Dairy Australia's regional development program for western Victoria. TAP integrates agriculture into the curriculum at every school level. This expansive education approach finds agriculture pursuits seamlessly embedded into the curriculum at every school level, with a special focus on Maths and Science. 'Classrooms' at Timboon now extend to poultry houses and gardens, food and textile production and processing businesses across the district; as well as a dedicated agriculture precinct for crops, such as lavender.

One-hundred and fifty-eight (158) individuals from industry and community have made direct contributions of time in the development and/or delivery of curriculum, or the development of the TAP precinct, since the start of the TAP in July 2012. This includes, presentations from a butcher (for Year 7 and 8 food and agriculture) and large animal vets (for Year 5 farm safety; Year 7 and 8 Science animal welfare; and Year 10 Science: genetics).

Overseen by a school and industry Steering
Committee, early funding for the project
came from a Gardiner Foundation grant and a
Commonwealth Government Empowering Local
Schools grant. The Foundation's grant enabled
WestVic Dairy to appoint a project coordinator to work
with the school for the first 12 months. This role has
evolved into a 'learning broker' position liaising between
industry specialists and teaching staff to facilitate, develop and
trial new curriculum and so on. The dairy industry's training
provider, the National Centre for Dairy Education Australia
(NCDEA), is funding TAP in 2014-2015.



Outcomes

School data in the late 2000s showed that students had a poor attitude to learning. Academic results were not what they could be and school enrolment figures were dropping. Something had to change and, in 2010, the Leadership team of Timboon P-12 saw that what needed to change was the three way inter-relationship between students, learning and the local community. This led to the development of a collaborative vision for the school and the local community. Driving this vision were three key guestions: 'What skills and/or strengths do our young people need to succeed?' 'What does this community need from its young people, now and into the future?' and 'What do young people need from this community to succeed?'

The location of Timboon P-12 school has an economy that is predominantly reliant on food production, particularly dairy. School enrolment data indicates that 70% of Timboon P-12's students come from families directly or indirectly involved in Agribusiness. Young people, however, traditionally have a limited understanding of the diversity of people and skills that contribute to these industries, and to the community that sustains it.

The TAP pilot was developed to give students a broad exposure to their own community and the opportunities it offers. More broadly, the TAP was developed to overcome knowledge gaps and (re)build interests and aspirations in agriculture. After all, there are well recognised skills shortages in Australia agriculture (e.g. the production of food, from paddock to plate). The TAP pilot developed around the nexus between students, learning and the community around this agriculture focus. While it is still early days for the pilot, the school, its community and others are noticing improvements in a range of outcome areas.

Examples include

Improving

What might help you notice whether improvements are being made? Through... Evidence and approaches, such as

Academic outcomes

- Students' results in NAPLAN, since the introduction of TAP, have shown significant improvements leading to Timboon P-12 being singled out nationally for its 2013 results.
- Most of the TAP VET students are studying Certificate II or III in Agriculture, with the NCDEA. One has a traineeship with the local veterinary clinic and is studying for her Certificate II in Animal Studies.

Student engagement

- By expanding the idea of 'classrooms' to include a diversity of sites, such as poultry houses, annual student surveys have shown a striking improvement in attitudes to learning since TAP was introduced.
- Meeting specific curriculum outcomes (for example in Maths and Science) underpin the design of TAP. This creates a diverse range of learning opportunities for students (and teachers) allowing them to develop a range of skills, experiences and understanding far beyond what a traditional curriculum might offer.

"I look forward to my children taking part as the years go on".

- Visible signs of student enthusiasm in TAP learning (e.g. unsolicited positive comments from students about what they are doing and from industry presenter parents noticing the vigour at which students applied themselves to a task: "It was fantastic to see how enthusiastic the students were about getting their hands dirty and doing some practical studies...")
- Parental attitudes to the TAP focus at the school: "I look forward to my children taking part as the years go on".

Student capabilities:

communication

- The applied learning approach of TAP requires students to question and engage with different presenters in the classroom and in industry settings.
- Learning through TAP has brought significant attention to Timboon P-12 and the community more generally. Students have 'stepped up' to talk to visiting academics, industry reps and teachers from other schools about their curriculum activities.
- Around 200 students from the school each year are involved in preparing and delivering an active snapshot of their curriculum at a TAPs On forum for students from other schools and year levels.

continued

Examples include

Improving

What might help you notice whether improvements are being made? Through... Evidence and approaches, such as

Student capabilities:

leadership

• Older students mentoring younger students (e.g. VCAL students working with Grade 6 students on the construction and ongoing development of the poultry precinct. Year 8 students working with Year 1 and 2 students on tree planting. Year 4/5 students continue to be mentored by Year 7/8 Food Tech students in the Stephanie Alexander Kitchen Garden program).

Student capabilities:

social enterprise

- Students are researching ideas to remodel and kit out a food van for use at farmers' markets.
- 1000 lavender plants form the basis of a business enterprise being developed in support of curriculum, in response to student demand at the conclusion of the first TAP Small Business unit. Mentored by a retired local lavender producer, the students investigated and sourced different species of lavender plants and developed a business plan.

Community engagement

- Increased number of partners in learning from industry.
- The passion displayed by industry partners as they present and work with Timboon P-12 students on different projects. The presenters willingly share their expertise, provide insight into their work with students and offer education and career pathway advice.
- External programs are integrated into the curriculum increasing the number and diversity of applied learning opportunities for students at all levels (e.g. Dairy Australia: 'Cows create careers' - manufacturing module; Wannon Water: 'Water it, Grow it, Cook it').
- The processes of TAP lead to the creation of active local champions for effective school-industry engagement among its staff and school families. These champions share TAP's processes and results in community, education and industry settings.
- Vocational training is delivered on the TAP precinct to students from Timboon and neighbouring schools undertaking a schoolbased apprenticeship.

Lessons learned

'People power' creates the conditions to 'measure success':

This program would not be possible without 'People Power'. The amazing energy, enthusiasm and drive that our teachers, parents and agri-business partners contribute is truly outstanding. The industry-provided project coordinator (Andrea Vallance) supports our teaching staff to link with industry partners and this position is pivotal to the success of the program.

A clear focus helps you know what you are trying to change: The TAP is built on a strong belief that learning can be enhanced by applying scientific, mathematical, business and key learning concepts to real life situations. It is this curriculum focus that gives us the educational rationale for the program. The program provides our students with the opportunity to work with inspirational and aspirational adults from diverse career backgrounds and areas of expertise. The TAP connects text book learning to real life situations and creates those relationships that support career-defining moments.

Data comes in different forms for different purposes:

NAPLAN data, parent and student attitude and school data can all be used to validate the program, but it is the enthusiasm of the students and the positive, ongoing support of our program partners that keeps the project high on the school agenda. In 2014 (up to today, and there's more to come), 93 people contributed their expertise and spent 167 direct contact hours with teachers and students - 57 of them for the first time, 36 coming back for a repeat or extension of their involvement. It is statistics like this, and the ongoing support we have had for the program over the last three years, that gives us the enthusiasm, energy and confidence to keep the program going.