

## Agricultural partnership

### Case study summary

Description	<p>Agricultural partnership was established in 2006, in response to skills shortages across the agricultural business industry and the need to attract, train and retain a skilled workforce for the future. The project covers a variety of exciting career pathways and jobs associated with the farm-to-consumer supply chain.</p> <p>Specifically, the project:</p> <ul style="list-style-type: none"><li>• helps students gain valuable industry experience while still at school, providing them with the tools and knowledge to make informed decisions about agricultural business-related training and employment when leaving school</li><li>• raises the profile of careers in the agricultural business sector</li><li>• encourages meaningful collaboration between schools, Vocational Education and Training (VET) providers, universities and industry to provide agricultural business career opportunities for young people</li><li>• offers teacher professional development opportunities.</li></ul>
Governance	<p>Agricultural partnership is a government-funded project. The partnership was initiated (and is sponsored) by the Queensland Government as part of the initiative of increasing industry-school engagement.</p> <p>The partnership work is governed under a Memorandum of Understanding (MOU) between the partnership and participating schools, setting up a formal relationship after submission of an Expression of Interest to participate in the project.</p> <p>Further, an Industry Reference Group consisting of universities, schools, industry groups, registered training organisations and government is in operation, helping to shape and guide the project. Formal records of the Industry Reference Group are maintained.</p> <p>The Department of Employment Small Business and Training (DESBT), the funder of the program, awarded DAF the contract via a competitive process. DAF has offices across the state and covers all the diverse agriculture industries.</p>
Operation	<p>Agricultural partnership offers school-based agricultural programs such as implementing AgTech in schools (n=20), introducing agriculture into Years 9 and 10, or 'Next Gen Ag'. It currently has over 200 partners, works with 80 schools, and is supported by more than 200 industry partners (e.g., Growcom, Canegrowers, GrainCorp, Tassal) and more than 30 DAF staff (mentors) state-wide over the duration of the project. It collaborates with other partnerships (e.g., ICT, Tourism and Hospitality) and partners with local government agencies (e.g., Bundaberg Regional Council).</p> <p>Agricultural partnership participating schools (n=80) are undertaking a range of projects that expose students to various aspects of the agricultural supply chain, including cropping, husbandry, data analysis, research, scientific trials, logistics, marketing and business management and emerging technologies. It</p>

	is able to use its state-wide resources, such as agricultural extension officers, to engage with schools and workplaces.
Engagement with young people/ workplaces/ educational institutions	<p>Agricultural partnership engages with and is grounded in schools. It utilises its state-wide mentors who have backgrounds in agricultural science, extension work, biosecurity, industry development and vocational education.</p> <p>Mentors are responsible for:</p> <ul style="list-style-type: none"> <li>• providing advice on agricultural related topics and issues</li> <li>• providing advice and assistance on school projects</li> <li>• providing links to other areas of expertise in DAF e.g., Horticulture, Biosecurity, Agri-Science</li> <li>• providing links to other Government agencies</li> <li>• assisting schools to develop new and local industry networks</li> <li>• assisting in organising industry speakers at school events</li> <li>• participating in school masterclasses via e-technology, or in person.</li> </ul> <p>For teachers, Agricultural partnership provides coaching on agricultural content in their subjects based on the national curriculum (i.e., “teach that content through an agricultural context”) and career aspect in relation to agriculture. It engages and provides students and teachers with industry connections (e.g., industry guest speaker talks, Q&amp;A panels on a regular basis) and hosts teacher professional development sessions for teacher capacity building (e.g., informed presentations, farm visits).</p> <p>To inform and promote the agricultural pathways to young people, Agricultural partnership has supported activities and events such as excursions for schools or the AgTech Immersion Day, an event in Bundaberg.</p> <p>It has piloted programs to inform and engage young people in different career pathways in agricultural industries, via e-career sessions on careers in the cotton industry, careers in the beef industry, and an e-career session titled “Young Vibrant and working in Ag” to cover an eclectic mix of agriculture career opportunities. The current Merino Wool Workforce pilot is an industry/school partnership, instigated by industry, that empowers students to understand career pathways into the wool industry while preparing them with skills required to attain an entry level job in the wool industry.</p> <p>Agricultural partnership engages with industry to identify skills requirements and facilitates opportunities for young people to gain hands-on experience through work experience and job placement. It also provides advice on educational modes to engage VET providers, universities and schools.</p> <p>In addition to these in-kind activities, Agricultural partnership provides a large portion of its yearly funding to schools via its Small Grants project. Small Grants continue to address training skills gaps by providing funding to schools for projects that develop and strengthen industry connections, support agricultural business studies and career pathways, and support students in completing agricultural business-related pre-vocational and</p>

	vocational training. This provides students with the foundational skills, knowledge and practical experience for working in the sector.
Continuity outcomes	A key feature for its continuity is the interests and energies of the school principals and teachers; developing engagements with the local agricultural industry requires effort and engagement by the principal and also highly engaged teachers, some of whom are not specialist agricultural teachers. Failure of the partnership would be a loss and negative impact on all partners as beyond the individual, there are workplace and community outcomes that can come from these successful partnerships.

### **Tentative findings**

#### ***Using five premises to evaluate the formation and ongoing development of the social partnership***

Factors supporting	Shared values, purposes and goals, and intended outcomes across partners Shared ownership and decision-making and relations with partners Trust and trustworthiness built locally Capacity building for partnership work
Areas for improvement	Partnership governance and leadership; securing school engagement and leadership commitment Staffing (i.e., local industry contact)

#### ***Post-school pathways – informing and engaging***

Context	A government-funded project
Aim	Encouraging young people to transition from school into further education and/or employment in agriculture-related industries; liaising between VET providers, universities schools and industry; and encouraging students to consider agriculture careers in a bid to mitigate future workforce shortages.
Informing	Making connections to several subjects (e.g., science, maths), teacher-parent interviews, teacher PD, industry talks
Engaging	AgTech immersion days, school excursions, farm visits, seasonal harvest paid work, piloting programs in partnership with agriculture-related industries (e.g., Cotton Australia (cotton industry), the Merino industry (sheep wool), Micron Group (horticulture supply chain), and the beef industry.

### **Context for the social partnership**

Agricultural partnership was established in 2006, in response to skills shortages across the agricultural business industry and the need to attract, train and retain a skilled workforce for our future. The project covers a variety of exciting career pathways and jobs associated with the farm-to-consumer supply chain, and was initiated (and is sponsored) by the Queensland Government.

The partnership work is governed under a Memorandum of Understanding (MOU) between the partnership and participating schools, setting up a formal relationship. Of note, it is managed by DAF and funded by DESBT. DAF was awarded the contract via a competitive process. DAF has offices across the state and covers all the diverse agriculture industries and as such is well suited to the delivery of this work.

Agricultural partnership aims to help young people make a successful transition from school into further education and/or employment in agriculture-related industries. Apart from liaising with VET providers, universities, schools and industry, it encourages students to consider agriculture careers in a bid to mitigate future workforce shortages. In particular, the Agricultural partnership plays a role in:

- developing curriculum resources to incorporate modern agricultural examples into business, science, technology, engineering, and mathematics subjects

- partnering with local industry to provide experience outside the classroom to promote careers in agricultural business
- increasing access to school-based apprenticeship or traineeship opportunities
- providing professional development and up-skilling opportunities for teachers
- helping schools to provide quality VET that equips school students with practical in-demand skills
- providing schools with opportunities to participate in pilot projects designed to ignite interest in working in agriculture. (DAF, 2021)

Its key partners include participating schools, VET providers, universities, industry peak bodies, industry enterprises and local communities. It currently works with 80 schools and is supported by more than 200 industry partners (e.g., Growcom, Canegrowers, GrainCorp, Tassal) and more than 30 DAF staff state-wide who have acted as mentors over the project's life. It also collaborates with other partnerships (e.g., ICT, Tourism and Hospitality) and partners with local government agencies (e.g., Bundaberg Regional Council).

Agricultural partnership participating schools are undertaking a range of projects that expose students to various aspects of the agricultural supply chain, including cropping, husbandry, data analysis, research, scientific trials, logistics, marketing and business management and emerging technologies. For example, Agricultural partnership offers school-based agricultural programs such as implementing AgTech in schools, introducing workforce pilots and undertaking niche agriculture projects relevant to their commodity of interest.

### **Evaluating the partnership work**

The tentative findings of this case study include identifying the premises that support the development and continuity of the partnership, and areas for improvements. The premises to evaluate the partnership work comprise building and maintaining: i) shared purposes and goals, and intended outcomes, ii) shared ownership and decision-making and relations with partners, iii) resources and capacity building for partnership work, iv) governance and leadership, and v) trust and trustworthiness. These are discussed in relation to building and sustaining the partnership work as well as informing about post-school pathways.

### ***Building the partnership***

Through review and considerations of the partner informants from diverse backgrounds, the partnership in this case study is held to comprise a localised network that connects some combination of schools, tertiary education providers, industry and government to work on local issues and community-building activities (Seddon & Billett, 2004). These capacity-building and developmental goals are well aligned to educational initiatives, particularly those that are required to engage effectively and collaboratively with those outside of educational institutions, that is managing school-to-work transitions. Achieving this common goal needs collaboration from different partners. That is,

“Pull a lot of people, all the stakeholders that could potentially be in that sector. So, it's bringing all those people together. So, you've got to engage with local government. You gotta engage with other local industries.” (industry advisor)

Through engagement with partners and stakeholders, the partnership plays the role of a conduit, facilitating the connections between schools and industry, and proactively developing such connections

“The [partnership] works as that sort of conduit, it connects the industries and the schools together. So, it connects schools to industries where they may not be aware of contacts and vice versa. It connects industries who might be looking to contribute into the education fear but don't know who to contact or get to go about some go about approaching so. [...] potential connections are not based upon personal knowledge of an individual teacher or

personal commitment of someone in industry. It's more formalized in trying to develop those partnerships as opposed to just waiting for them to happen.” (training and development manager)

This partnership demonstrated its commitment to achieving the shared goal, i.e., outcomes for young people, and its adaptability through managing changes and responding to emerging challenges. For example, during the COVID-19 pandemic and the flooding events, it took the initiative to reach out to partners such as skills advisors to seek advice on automating the process of harvesting through utilisation of automotive tractors, strategies to achieve labour efficiencies, and understanding skill requirements to develop courses/programs that “best help potential uptake of business skills [...] drive the uptake of training and the uptake of skilling” (e.g., targeting women in agriculture). On another instance, it coordinated the auditing process and ensured the accreditation maintained to make arrangements for an educational unit to be delivered onsite (i.e., a salmon farm):

“One of the procedures is identification predator audits and so we actually worked with the staff to get our students to develop that audit process. And so, they audited the seabird activity in the seal activity for a couple of days around one of the farm sites and provided that information to the industry. So, they satisfy their learning requirements for the unit of combatants. Industry actually got a tangible benefit out of it as well. And that's the power of having those two-way partnerships.” (training and development manager)

Through building relations with industry partners, it was expected this partnership be an agency that can speak for the sector: breaking away from the traditional school-industry partnership models which “help schools as opposed to looking for value added partnerships by making them mutually beneficial” to those that can initiate the conversation and discussion about “needing to change the content of what's being taught”. All this underpins the importance of building and maintaining relations with partners that comprise the partnership.

### ***Sustaining the partnership***

Sustaining the partnership work is premised on several factors. In this partnership, it was likely achieved through its developing of shared ownership, capacity building for the partnership work, and engagement and commitment from partners (e.g., schools, industry). Firstly, it was the commitment to the shared purposes and intended outcomes. That is, when having shared perceived needs, it is working collaboratively to achieve those that likely sustains the interest.

“There are a couple of drivers, but is it? Yeah, it's a perceived need. I mean, that need could be, could be a whole range of things that need could be to contribute to, to community in terms of terms of marketing, in terms of creating where brand awareness in terms of creating a good social license. It could be a whole range of needs as there's as long as the need is recognised by both parties. So, both parties have needs that are being met and they actually work together.” (training and development manager)

Secondly, the partnership strived for tangible outcomes for all partners because “if you want to maintain sustainability of partnerships, both parties need to be actually getting something tangible out of them.” It contributed to developing the sense of ownership to secure community involvement through its diverse Industry Reference Group and partners to ensure “advisory has to represent that community”. Such practice reflects partnerships are based on mutual sharing of expertise, knowledge, resources and skills (Clerke, 2013).

Additionally, as this partnership is grounded in schools, sustaining the partnership work is primarily premised on supportive and committed school leadership. There needs to be a clear commitment to the partnership work at the top level, i.e., the principal.

“you've gotta have principals that are willing to listen to your ideas and be supportive and yeah give it a go as well you know. Trial and error, but he certainly allows teachers or staff whether it be the guidance office, whoever, to seek little projects and to run projects and give them ownership, you know, and I think that's what we'll build the capacity in the school and them as a teacher and that's what's going to enrich the school.” (professional coordinator)

Such leadership commitment needs to be supported and distributed to a team of teachers or staff. That is, schools need to put in more effort to engage and support teachers in upskilling – teacher qualities and dispositions.

“... you've gotta be given time in a school to do it, to make sure it's successful. You know, a lot of the application process and also the reporting process. That's all done in my time outside of school because I just can't get to it in school. So, you know, that's where it will fall, fall down if you don't have a dedicated person to look after these projects and it is a lot for that one person to do. You know when it comes to reporting time, you do have to spend a couple of hours sitting down and collating information and you know putting in the financials and things like that and it's time that you're not necessarily given in a school. It is a bit extra. So that's not sustainable” (professional coordinator)

This partnership is, by its nature, a gateway through which young people will get support and guidance to make effective transitions from school to employment or further education. Thus, it is important for empowerment and capacity building to occur in each school and the sustainability (ACER, 2008) of the partnership work in achieving its shared goals and intended outcomes for young people.

### ***Scope for improvements for continuity outcomes***

To ensure continuity outcomes, social partnerships may require support or specific interventions to develop the capacity for partnership work. In this case study, there is likely more scope for improvements to build and maintain the partnership work. This involved an enhanced engagement with industry, schools and community and seeking more committed participation from these partners.

It was suggested that direct access to a local industry contact was deemed important. That is, this person or organisational body is locally situated knowing local contacts, thus being able to understand local circumstances to play an effective role of “a conduit [bridge] between the school and industry”.

“you know that person that can say, oh, look, there's a field day happening, or would your students be interested in attending this or can I come in and talk about careers or, you know? And I think it really it comes back to having that local officer right there. So, you can access anytime.” (professional coordinator)

On this aspect, securing engagement from industry is crucial. However, the partnership needs to engage the industry in a way that mutual benefits are clearly envisioned (e.g., pipeline for the industry). Such an engagement might fail if “the industry doesn't see the relationship or the benefit to them”. When it is successfully developed and maintained, it will generate benefits and positive outcomes for all involved partners.

“It's beneficial for everyone at if we get even farmers coming through when saying you know this is what I do every single day, this is my job. It involves technology and math science. They want workforce as well and I think if they can share their stories, yeah, it's going to be much more valuable in the community. [...] industry have to have a bit more of a drive as well to try and make connections with schools.” (professional coordinator)

Another key feature for the partnership's continuity is the interests and energies of the principal and teachers as developing engagements with the local agricultural industry requires effort and engagement by the principal and also highly engaged teachers. Failure of the partnership would be a loss and negative impact on all partners as beyond the individual, there are workplace and community outcomes that can come from these successful partnerships. Staffing issues (i.e., agricultural assistant) at schools was seen as a barrier to the development and ongoing engagement from schools.

“We don't have AG assistant, so that's not sustainable either you know. So, the if we really would like to make a difference, you do have to have the staffing to support whatever is going on in the school and whether it be you know a small little garden plot or whether they have bees or chooks, or you know they do have to invest.” (professional coordinator)

This also pointed to a change of approach to involve schools, i.e., “the schools would choose to be involved as opposed to being targeted to be involved.” This allows schools to actively seek opportunities to involve different sectors of the community, including “boundary crossers” (Walker & Nocon, 2007), and those who would not normally have contact with the schools. An active and purposeful role in decision-making will contribute to enhancing school engagement and commitment to the partnership work.

Recommendations were put forward for the partnership to enhance the engagement and collaboration between schools and industry. This included schools collaborating with industry to create actual employment pathways. That is, an example of the training model: providing school-based programs embedded with workplace outcomes, then working closely with industry to provide employment opportunities at the end of the program. Also included in the model is teacher professional development and facility setup in schools.

“One because industry doesn't work closely in enough with schools. But two because schools are offering these programs as engagement activities for young people as opposed to employment pathways.” (training and development manager)

This requires an extension of the scope of the partnership work, e.g., connecting industry employers to schools to deliver programs meeting industry needs. In this way, the partnership, as noted earlier, was expected to play the role of a spokesperson for the sector.

Ultimately, supporting young people and the community in which they live and engage was expected because of this partnership work. That is, promoting the sense of community, sustaining the viability of the community, and providing young people opportunities locally.

“... it's quite an interesting contrast to the situation in in rural and regional Tasmania. So, whereas some in Tasmania there's the old saying that if you wanna succeed, you actually have to leave the state. [...] Parents started not to value education because if they value education, they think that their young people are gonna be educated and they're gonna leave. [...] The expectation is that they will leave their regional area and not only does that contribute to the unemployment or to the employment issues in that the tourism hospitality industry can't find people, the agriculture industry can't find people and also does in some way destroy that sense of community by removing that next year, and some of them will return. So yeah, I'm all about promoting the value of remaining in” (training and development manager)

In all, this partnership was held to be the interactive and collaborative process of working together to identify, negotiate and articulate shared goals, and to develop processes for realising and reviewing those goals (Billett et al., 2005). It has quite effectively embraced and harnessed the contributions of different partners in the collective work of realising shared goals and intended outcomes. However, there are certain areas that can be enacted to improve the continuity outcomes, sustaining the partnership work. These comprised securing enhanced engagement and commitment from industry, schools and community.

### **Informing young people about and engaging them in post-school pathways**

Assisting young people make a successful transition from school into further education and/or employment in agricultural business-related industries is the primary purpose of this partnership. It sought to achieve this through engagement with its partners through various channels. These included organising activities and events such as excursions for schools or the AgTech and immersion programs (e.g., work placements). It also frequently updated its online resources and organised ‘pop-up schools’ to engage young people in post-school pathways conversation:

[online resource] “... it's interactive and it keeps updating all the time, so it guides them through all that lower level but also the universities and that that's creates that putting that pathway picture together” (industry advisor)

[pop-up schools] “so students could come along, they would be doing remote trade and then they would come into an area for a week. So, they might come to a local university, a local town area where they could get a conversation and undertake some interaction together on that space.” (industry advisor)

It has utilised more than 30 mentors state-wide across the life of the project who have backgrounds in agricultural science, extension work, biosecurity, industry development and vocational education. These mentors were responsible for linking up contacts, making connections and working with local agricultural businesses. They also assisted with sourcing advice for schools wanting to reinvigorate or establish new agriculture programs. To build capacity for partners, the partnership provided coaching for teachers on agricultural content in their subjects based on the national curriculum (i.e., “teach that content through an agricultural context”) and career aspect in relation to agriculture. It engaged and provided students and teachers with industry connections (e.g., industry guest speaker talks, Q&A panels on a regular basis) and hosted teacher professional development sessions (e.g., informed presentations, farm visits).

It involved industry partners in raising young people’s awareness of the existing industries in their region:

“We put a lot of effort into developing that, that awareness and that's why the [partnership] is great in, in terms of my involvement with the [name of the partnership] program is that it is making students aware of industries that they that might be in their region, but they certainly might not be aware of at all like for example houses, our industry [aquaculture] is very new.”  
(training and development manager)

Through industry partners, it has also implemented some piloting projects to inform and engage young people in different career pathways in agricultural industries, for example, Cotton Australia (cotton industry) the Merino industry (sheep wool), Micron Group (horticulture supply chain), and the beef industry. It engaged with industry to identify level of skills required and provided young people with hands-on experience. It also contributed to providing advice on educational models to engage tertiary education and schools.

Through school partners, it engaged parents and community in National Agriculture Day, through newsletters, social media platforms (e.g., Facebook), teacher-parent interviews and school grounds to celebrate agriculture.

“I think we do it pretty good as a school. We're very community orientated. [...] So, I think every you know everyone, our communities pretty aware of what we're doing in terms of our Gateway School initiative, and we have signage up near our plot. We have logos that we when we donate our produce to Meals on Wheels, and we sell our products to a local restaurant.”  
(professional coordinator)

For example, the case of making arrangements for an educational unit to be delivered onsite, noted earlier, authentically engaged young people in the workplace environment where they were given the responsibilities of employees.

“... go out onto the workplace and be given that actual workplace responsibility by the company, just really value that adds the experience and makes them learn for far more rewarding.” (training and development manager)

Intended outcomes for young people as a result of partnering with the industry included Year 11 school-based apprentices (after having completed a Certificate II) were employed in the industry and Year 12 students (undertaking a Certificate III) were engaged in onsite training.

“In Year 12, and that will actually bring them onto the site a day a week for throughout that year, undertaking training in a certificate III so it evaluates the learning, the prior learning experience, but it also increases those workplace expectations.” (training and development manager)

Further engagement of young people in work experience (paid employment) also included a seasonal harvest work program in aquaculture, horticulture and cane. This is likely an effective form of industry/career tasters to contextualise the knowledge they are learning.

With regard to informing young people and engaging them in diverse post-school pathways within the agriculture-related industries, this partnership has extended its reach quite widely to seek advice and secure support from its partners to achieve the shared goal and intended outcomes for



young people. To better such outcomes, it was recommended for the partnership to secure schools' engagement in the industry:

"the next thing is really getting schools to appreciate the value in in this area of vocational education and training as a as a part, a proper part of the pathway" (industry advisor)

It was also suggested to extend its reach into primary school level. That is, upskilling teachers in primary schools to have young children informed at an earlier stage through industry programs/connections with schools.

"Get them talking about careers early on and get them saying, well, technology is involved in the, you know, the whole theme will stem concept and a lot of teachers in primary. I found a very hesitant or they're a little bit scared of teaching science because they're not they haven't been trained in it. They're not comfortable themselves and that's where it comes down to unless you're confident. Yeah. You're not going to be able to pass that message" (professional coordinator)

The partnership work could involve an uptake of technologies such as augmented reality and communicate the message to the wider community, "changing the narrative [...] push AgTech and better understanding of production". It could also contribute to developing young people's work readiness such as preparing students for the world of work (e.g., attitudes, expectations, responsibilities) in addition to raising awareness or replicated workplace setting in terms of equipment or facilities.

"So, it's not just awareness of what jobs are available, but it's preparing students to be able to take those jobs. For many cases, industry is their own worst enemy. That as well because industry says we just want people with good attitudes, and we'll teach them the rest well." (training and development manager)

"This is one of the issues around programs that have a workplace focus in schools is that big is they're not. They don't teach them or expose them to any of those workplace attitudes, and they don't get to practice them. They're told about. You need to have a good attitude and you need to be responsible and you need to have initiative, but they're never given any opportunity to develop or show. Show those skills. So, it's really important that the way that those career-based education programs are delivered." (training and development manager)

The analysis of this case study confirms the importance of social partnerships such as this one in informing and engaging young people in diverse post-school pathways thus contributing to improving employment and educational outcomes for young people. However, these partnerships do not just happen as a result of external demand: they have to be enabled and supported. The partnership work is in need of collective effort and sometimes cannot be judged on the basis of measurable outcomes.

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