

# AGRICULTURAL EDUCATION FORUM, Brisbane 21 April 2023



## BACKGROUND PAPERS

Examples of successful agricultural education initiatives  
presented in order of receipt. 1



The National Farmers' Federation is strongly supportive of initiatives that encourage and enable people to better understand and hopefully choose to participate in the agriculture industry.

The recent research conducted by AgriFutures provides an analysis on how we can best bridge the gap and bring community perceptions into alignment with worker experiences which are much more positive. The report provides an optimistic outlook on the story the industry has to tell, it is important for us to consider how we become more involved in the curriculum so young people in particular have a better understanding of the existing and emerging opportunities the industry has to offer.

There is a clear disconnect between the range and depth of career opportunities in the agriculture sector and public perceptions, including among school students and their advisers. Agriculture is far more high-tech and we should be encouraging students engaged in STEM subjects to view agriculture as an equal or more desirable field than its competitors due to the quickly changing technological landscape.

Another important part of our 2030 Roadmap<sup>1</sup> the NFF called for “a clear career pathway to attract workers and develop their skills, with tailored streams for new entrants through to seasoned professional”.<sup>2</sup> We must significantly improve the quality of information linking industry, training options, and employment outcomes, as well as improve the accuracy and usefulness of information on VET options to assist those struggling through the complex information maze.

One of the key actions of the NFF 2030 Roadmap is ‘establish[ing] a nationally consistent ‘trade-equivalent’ job brand for skilled farm workers. Although ‘traineeships’ are available in agriculture, they are shorter and less intensive/comprehensive than a true, ‘trade-equivalent’ apprenticeship

There is undoubtedly plenty of opportunities to strengthen industry links with RTOs within the VET sector, and to also improve significantly the quality and volume of information linking training options to employment outcomes, as well as improve the accuracy and usefulness of information on VET options particularly for employers and students who often struggle to find their way through the complex information maze.

### **Improving community perceptions in agriculture**

- Develop a targeted campaign promoting the emerging opportunities in agriculture which may entice school leavers to take-up further study in agriculture and related fields, as well as attract people making career changes to the sector.

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<sup>1</sup> <https://nff.org.au/policies/roadmap/>

<sup>2</sup> Aspiration 4.1

Mining and Defence have both shown great success from highly targeted media campaigns which advertise and promote an experience. These campaigns go beyond promoting a job, but rather sell a value proposition to contribute to the public good and obtain skills that are transferable to other fields. Working in agriculture offers unique opportunities to contribute to the supply of high quality and nutritious food, contribute to environmental sustainability, and work in complex systems with cutting edge technology. This could leverage AgriFutures research into the different pull factors to attract workers.

- Build on industry events such as AgDay to increase public engagement and raise community awareness about ag, get ag into the education system, get people into the industry and keep them in the industry.

### **Increasing engagement in the school curriculum**

Embedding agriculture in early schooling curriculum is likely to lead to greater uptake of agriculture in later life however will require state and territory authorities being engaged by industry.

- Barker College Case Study - The Barker College case study is an example of how teaching agriculture in secondary schools alongside other prestigious subjects such as biology and chemistry can lead to higher uptake from students in further study in agriculture and related fields. This is a model industry could look to when engaging with relevant school districts and education authorities. The NFF has been promoting this model in the Agriculture Workforce Working Group. Barker demonstrates the importance of teaching and promoting agriculture to urban students, given that over 90 per cent of Australians live in urban areas.
- Educating Kids about agriculture \$10m - 2019 Election Commitment.
- iFarms - placing integrated farming platforms or 'mini farms' in urban based high schools to increase students' understanding of where and how food and fibre is produced.
- Kids to Farms - sponsoring primary school visits to farms and primary production worksites to facilitate learning about agricultural production, sustainability practices and land stewardship.

### **Other programs for attracting workers**

- AgCAREERSTART - A gap year pilot program led by the National Farmers' Federation for young Australians, allowing them a 12-month opportunity to try working in the agriculture sector and experience a taste of what a regional lifestyle can offer. Three gap year intakes will be available (2022, 2023 and 2024). This is a great program that not only provides opportunities on-farm, but also industry engagement and training, and has a multiplier effect as participants pass on positive experiences to other young people in their network.

*AgCAREERSTART has been a huge success at bringing in young people with no prior connection to agriculture. Since its inception, the program has put 100 young people on farms across Australia, and many of those participants have altered their future study plans to embrace agriculture. It is a great advertisement, not just for farm careers, but for VET in agriculture. The VET system should enable that integration, rather than frustrating it.*

- **AGSKILLED 2.0** – The AgSkilled model bolster the quality and relevance of formal training in the farm sector. Funding is available to on-farm staff and industry professionals including for subsidised access to nationally recognised full qualifications in agriculture, and fee-free part qualifications for short courses that target identified skills gaps. Training responds to the needs of industry, and funding is tailored to demonstrated requirements and can be adjusted

to suit students with a range of skills and experience. It is offered in areas as diverse as precision agriculture, emerging technologies, business management, farm machinery operation and maintenance, and soils and nutrition.

The NFF's pre-budget submission has sought \$50 million over three years to enable a national roll-out of the AgSkilled initiative. With support of other participants in the 'tripartite' Australian Agricultural Workforce Working Group, the NFF is pressing for a broader, national roll-out of the program.

- AgUP – a program that provides grant funding to three successful applicants to support industry led projects that create opportunities for attraction, retention, upskilling, training, mentoring and career progression for the agricultural workforce. All projects run from 2021-22 to 2024-25



## Australia Wool Innovation Education Programs Briefing Paper

### - **SA sheep expo**

The SA Sheep Expo offers young people (aged 12-23 years) a platform to develop a better understanding of the sheep industry, the opportunities it offers and to encourage the next generation to engage at a grassroots level within the industry. AWI provide sponsorship of this event each year and are allocated time to speak to participants. Though the expo had to be cancelled in 2022 due to covid, in 2021 there were 97 participants in attendance.

### - **Agricultural Shows of Australia (merino sheep and merino fleece young judges' competitions)**

Agricultural Shows of Australia run two national competitions - merino fleece and merino sheep judging. AWI supports the program by providing the winners with prize money and presenting the awards. In addition to this, AWI also provide all national competitors (one entry from each state) with AWI labelled dust coats and Vests. At the Sydney Royal Easter show this year we had competitors from both 2021 and 2022 battle it out for the top spots nationally.

### - **School Merino Whether Challenge**

In South Australia, NSW and Western Australia the highly popular high school wether competition develops students understanding of the many benefits of running merinos. AWI supports each state's stud merino breeders association who run the competition.

### - **Young Farming Champions**

Gives young people (aged 18-28) in the industry skills in speaking positively about their industry to a consumer audience. Strong focus on personal development particularly in public speaking and presenting clearly and in an engaging way. We selected one new Young Farming Champion, Florance McGufficke, as the winner of our 2022/23 Emerging Young Leaders Scholarship.

Further to this we have been engaging with the Young Farming Champion alumni to better connect them with AWI programs. We are in the process of starting up a mentoring program between AWI staff and 6 of the alumni.

### - **Nuffield Scholars**

The Nuffield Scholars program is a combination of personal and professional development. Scholars apply with a question they'd like to research on behalf of their industry. It is common for their research question to be worked with the assistance of their industry sponsor. AWI supports 1 position annually (if a suitable candidate is found).

Nicole Logg has been selected as AWI's Nuffield Scholar for 2023. Nicole will research strategic use of supplements to improve sheep productivity.

### - **Science & Innovation Awards**

AWI awards annually a science and innovation award up to \$22,000 for an applicant to research or develop something to suit our industry (if a suitable candidate is found). Applications run from pure research to applied technology and the age bracket is 15-35-year-olds.

- **Breeding Leadership**

Breeding Leadership is an AWI owned and run, 5-day course aimed at young people (mainly 25–35-year-olds) across the wool industry to improve strategic and personal skills. It's held every second year and participants leave with the skills to enable them to become enthusiastic, influential, and dedicated leaders within the wool industry.

In June 2022, 19 young industry professions took place in the course. The overall value of Breeding Leadership was ranked 4.94 out of 5 and the skills or knowledge gained to help improve yourself was ranked 4.67 out of 5 by the participants.

- **Hay Inc**

Rural education for young people aged 12-35 years old who are wanting to join the industry. This program was set up to be similar to what a jackaroo or jillaroo will learn doing a year on a station or property, and provides young people with a variety of practical skills, from fencing to shearing to motorbike riding all within a few weeks.

The program had another successful year in 2022, putting 15 participants through the program. 12 applications have already been submitted for the 2023 program due to kick off in February.

- **Horizon Scholarship**

Target age 18-23. This is a cross industry project for people going into ag and vet courses at uni. The scholarship goes over two years, with \$5,000/yr towards tuition and \$5,000 for out-of-pocket expenses incurred in undertaking work placement. Run by Agrifutures. In 2022 we supported one Horizon Scholar – Jessica Curran. In 2023 we plan to support another scholar (if a suitable candidate is found).

- **CSU & USYD Sheep & Wool Tour**

Charles Sturt University Wagga and The University of Sydney run an annual sheep and wool tour for students through the Riverina. Students gain an insight into differing sheep operations and are exposed to sheep and wool careers, with the ultimate goal of them entering careers in the industry post study. AWI supports this program annually and are provided with an opportunity to deliver a presentation to the students. On average around 70 students per year take part in the trip.

- **AUASA / Growing The Future Event**

AWI annually provides sponsorship of Adelaide University Agricultural Students Association (AUASA) so that students are exposed to sheep and wool careers. Being a sponsor of this association allows for AWI to open the lines of communication with university students but also allows us to be invited to any AUASA events to speak. The main one being there 'Growing The Future Event' held annually. This year saw 150 people plus in attendance.

- **University of New England**

AWI provides sponsorship of the University of New England (UNE) Farming Futures career day. Aimed at university attendees, sponsorship of this event allows AWI to create networking opportunities with students so that they are exposed to sheep and wool careers. At this year's event there were over 250 students in attendance.

- **Peter Westblade Scholarship**

AWI supports the running of the Peter Westblade Scholarship (PWS) by providing sponsorship. The PWS aim is to train young aspiring leaders to enter the industry. It promotes the practical skills associated with the sheep and wool industry and facilitates hands on experience. Though AWI only came on board for the first time in 2022 as a sponsor, this course saw 10 young leaders put through the course.

## PRIMARY/SECONDARY (5-12 YEARS)

Learn About Wool [www.learnaboutwool.com](http://www.learnaboutwool.com)

*Learn About Wool* education resources are helping teach primary and secondary students about the unique and natural benefits of Australian wool. The extensive classroom resources describe in detail the on-farm production, processing, marketing and fashion aspects of Australia's natural fibre. Whether investigating wool as a material for a fashion project, exploring its rich and colourful history or investigating the way modern wool producers manage the natural environment, the Learn About Wool resources engage and excite students across all ages and learning areas.

As well as being available as an online resource, the free and popular Learn About Wool resource kit – which includes real fibre, yarn and fabric samples, multimedia presentations, factsheets and posters – is still being delivered to schools throughout Australia. The kit was initially launched in 2013 and has proved very popular; it can be ordered through the *Learn About Wool* kit tab.

## SECONDARY (13 – 18 YEARS)

Wool4School Design Competition [www.wool4school.com](http://www.wool4school.com)

Wool4School is an annual education program in the form of a design competition targeting secondary school students in Australia, Italy and UK. First launched in 2012, Wool4School has involved more than 120,000 students globally, not only learning the fundamentals of fashion design, but also exploring the benefits and versatility of wool.

More than 70,000 fashion/design students participated in the competition over the last three years.

## TERTIARY (18 – 21 YEARS)

Fashion and Design: To engage and educate Tertiary Fashion and Design students, AWI/TWC run the following programs:

1. Naturally Inspiring Seminars
2. Masterclasses/Workshops
3. Wool Appreciation Courses
4. Woolmark Performance Challenge (WPC)

RESULTS 2019-22: 20,000 fashion/design students participated in the education programs globally (excluding WPC)

Textile Engineering: The Wool Science Program (7 courses) is aimed at educating the next generation of Textile Engineering students. Current focus is in China and India where these skills are required. The courses are delivered in a face-to-face capacity (in person or online) and can be accessed via the Woolmark learning Centre.

Over 800 textile engineering students participated in The Wool Science program in the target market of China.

THE WOOLMARK LEARNING CENTRE [www.woolmarklearningcentre.com](http://www.woolmarklearningcentre.com)

The Woolmark Learning Centre is the premier digital education platform for the wool industry. Industry knowledge, resources and programs are shared globally across disciplines, promoting a deeper understanding of wool at every stage of the supply chain. The platform is freely accessible worldwide.

Since launching in December 2019 there have been 12 courses launched across the following programs:

- Fundamentals Program (2)
- Science and Technology Program (7)
- Fashion and Design Program (2)
- Sustainability and Wool (1)

In addition to courses, The Woolmark Learning Centre has an 'Insight Series' where you can gain knowledge from the fashion and textile industry's emerging and established leaders. Our series of exclusive conversations provide rich and unique insight into the innovative approaches these designers, innovators and change-makers have to business, design, manufacturing and supply chain management.

RESULTS 2019-22 Over 4,000 course completions on the digital education platform.

TRADE (21- 40+ YEARS)
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AWI/TWCs education programs do not stop with students, they extend throughout the entire wool supply chain:

- The Wool Lab – [The Wool Lab | The Woolmark Company](#)  
The world's premiere collection of curated innovative yarns, fabrics and processes dedicated to wool. You can access online via the above link or in physical format via presentations by Business Development Managers globally.
- Trade Engagement  
Exhibiting the worlds most influential yarn, fabric, sports/outdoor, textile machinery shows.
- Development Centres, including:
  - o Donghua University (China)
  - o Nanshan Weave Centre (China)
  - o Xiano Knit Centre (China)
  - o La Caserne (France)
  - o D-House (Italy)
  - o WoTO (Netherlands)

For more information, <https://www.woolmark.com/industry/support/development-centres/>





Cotton Australia is committed to providing educators, students and parents with tangible information and knowledge to ensure that the forward-thinking, sustainable, and positive credentials of the Australian cotton industry are understood and valued. We recognise that education also provides an opportunity to engage with the broader community to help attract a strong future workforce by showcasing the diverse range of interesting career opportunities available.

This is done via a large range of educational resources and engagement measures.

Our programs have evolved over the decades from a retail shop & learning centre in Darling Harbour, The Cotton Store, in the early 2000's to our current extensive outreach programs and professional partnerships.

The school's program was developed to enhance and expand the science, geography, technology and design, agriculture, primary industries and environmental syllabus outcomes in primary and high schools by providing relevant cotton information and opportunities for practical investigations and on-farm activities.

Cotton Australia's educational role has involved the following activities:

- Cotton Sample Kits – seed to fabric – posted for free to teachers across Australia
- Cotton Classroom website with a plethora of free digital resources including
  - Curriculum linked lesson plans and programs
  - Concise 10-chapter Education Kit for teachers and senior students
  - Video and photo library, including 360degree VR film
  - Interactive Quiz for most popular videos
  - Posters
  - Fact Sheets in Learn about Cotton
- Teach the teacher – free tours in cotton growing regions
- Educational exhibits at Sydney Royal Easter Show and EKKA
- Career Expo's: AgVision (Sydney Showground), MacArthur Careers (western Syd), NorthWest Careers NSW (Tamworth), Emerald Career Day etc
- Teacher Conferences: Home Economics (HEIA), Agricultural Educators Conference
- Scholarships
  - 8 teachers sponsored to attend Cotton Conference in 2022
  - 48 senior students sponsored to attend Cotton Conference in 2022
  - 10 uni undergrads sponsored to attend Cotton Conference in 2022
  - 2 teachers sponsored to attend NAAE (National Ag Educators) Conference 2023
  - 2 teachers sponsored to attend PIEFA conference 2023
- Partnerships
  - PIEFA Membership
  - CQU – Get Excited 4 a Career in Agriculture
  - University of Sydney – Work experience at Sydney Royal Easter Show

## Spotlight on one successful activity – TEACH THE TEACHER TOURS

Over the past few years, we have facilitated hundreds of teachers, career advisors and school executive staff on tours of cotton farms and cotton gins with our Teach the Teacher Tours so educators can learn first-hand how technologically driven and innovative the cotton industry is and to showcase the careers available so they can better educate their students with current data and opportunities back at school.

Cotton Australia staff facilitate the Tours with support from the local Cotton Growing Association (CGA), a cotton grower, cotton gin and CottonInfo team members.

Typically, Cotton Australia manage all the administration and promotion of the tours and fund the bus transport for the Tour. The CGA & cotton gin donate their time and host a light dinner and drinks, and the grower and other industry members donate their time and knowledge over the course of the Tour.

In 2021, we moved to EventBrite to manage bookings and communicate details and reminders of the Tours which have proven to be very successful while taking an enormous amount of pressure off our team to make this process seamless and professional.

Our intended outcomes from the Teach the Teacher Tours is for teachers to include cotton in their teaching programs that support students to become responsible consumers, value farmers who produce the crops, discover the range of careers in the industry and learn how growers are environmental stewards credited with producing some of the most sustainable cotton globally.

In 2021, we surveyed 239 educators that attended eight Teach the Teacher Tours across the regions that grow cotton in Australia.

- 159 secondary teachers, 67 primary teachers, 12 other, 1 tertiary.
- 75% from government schools, 15% from catholic schools, 4% independent, 1% university
- Years Teaching: 48% 1-5 years, 19%, 5-10 years, 17% 10+ years, 2% pre-service.
- Secondary teachers – In order of subject taught; Science, agriculture, geography, maths, tech mandatory, textiles, business, English, PDHPE, Arts

Our pre and post survey data from past attendees shows that typically only 19% had previously delivered cotton within their teaching programs and only 33% had ever visited a farm before. 100% said they would include aspects of cotton into their teaching programs moving forward.

67% never visited a cotton farm  
12% never visited a farm  
77% never visited a gin  
67% never taught about cotton

On our pre survey, we ask teachers to list 5 words that come to mind when they think about the cotton industry, and we ask the same question on the post survey.

The below word-infographics clearly show a shift from the unknown to tangible knowledge and understanding. The five top words in the pre survey were: water, white, clothes, large and industry.

Juxtapose this against the five top words in the post survey: technology, sustainable, water, innovative and community. This huge shift is a clear indication of the success of the Tours.



# Wine Australia

Barossa Australia works with local secondary schools, vocational training institutions, state government personnel, and Barossa vineyard businesses to guide students into long-term careers in vineyard operations via a five-day structured work experience program.

During the program Barossa Australia makes presentations to local high school students with the aim of influencing their work experience decisions. It wants to give them a better understanding of what it might be like to work in operational viticulture – as a future career or as a stepping-stone to other roles in the wine sector.

A secondary objective is to educate the Barossa's next generation about the region's generational grape growing and winemaking, old vine history, sustainable wine grape growing, and the [Barossa Grounds Project](#), which evaluates variations in wine style across the soil profiles of the Barossa and Eden Valleys.

The program is run during the grape vine growing season, so that practical learning takes place in real time. It gives students hands-on experience and an understanding of the diverse types of work involved in operational viticulture and beyond.

Article: [Barossa viticulture apprentices in high demand.](#)





## **Industry Leaders Forum on Agricultural Education in Australia – APRIL 2023**

GPA's 2022 Federal Election Policy [Priorities](#) called for a range of policy initiatives and support measures, which collectively contribute to strengthening the productivity, profitability and sustainability of Australian grain producers and our industry. Top of this list of priorities was:

- Increase Supply of Skilled Workers on Grain Farms

### **GPA Training [HERE](#)**

GPA established GPA Training in 2020 to support the delivery of practical training and across industry, to improve farm safety standards and outcomes. It is also supporting the delivery of stewardship training, to help improve industry standards with the application of pesticides, for example double dose zinc phosphide mouse bait, and safeguard grain quality.

In 2021, GPA partnered with GrainCorp and Qube Agri to use GPA Training to provide grain site delivery induction training, at the company's grain delivery sites throughout their network.

Last year, GPA Training [successfully applied](#) for a government grant to deliver online farm safety education training to about 200 school students in South Australia. This allowed the Port Pirie Industry Training Hub, covering the Barossa, Yorke and Mid North regions, to use GPA Training's virtual training platform for senior secondary agriculture students. The Hub helps students build skills and choose occupations in demand in their region, creating better linkages between schools and local industries such as agriculture.

GPA Training has the capacity to help deliver other digital training and educational courses, with modules professionally designed to suit the program's specific needs, eg education on agriculture production, and where food comes from for primary, secondary or tertiary students. This could also be used to provide a paddock to plate educational experience for consumers.

### **GPA Advocacy**

Over the past couple of years, GPA has strongly advocated the critical need to increase the supply of skilled workers to operate heavy machinery during peak surge periods, such as harvesting and seeding. This need was exacerbated by ongoing worker shortages due to COVID-19, and subsequent State and International border closures. GPA's advocacy and policy work built on our submission to the National Agricultural Workforce Strategy which included a number of pilot program ideas, of which three proposals were noted in the final strategy. GPA's advocacy, in collaborating with other concerned groups such as the Australian Custom Harvesters Association, led to a number of positive initiatives based on a

National Action Plan implemented in mid-2021. This was highlighted by a new program run by volunteers and GPA State Members, where former ADF members connected with farmers needing labour, via social media, for the 2021-22 harvest. This volunteer initiative – [Operation Grain Harvest Assist](#) – provided mutually beneficial outcomes with workers to support grain farmers at a critical time, while giving the former ADF members a greater sense of purpose through this work and opportunities for career transition and future employment. It was estimated this program provided about 200-250 former ADF workers and it is continuing to evolve, driven by former ADF members. This program has also generated significant media interest, to help raise awareness of the core issues of farm labour shortages.

GPA's national action plan in 2021 also highlighted other policy requests; including calls for tax concessions to help incentivise retirees to work in regional areas; rural retailers, such as Elders and Nutrien Ag, allowing their staff to take leave without pay, to work on grain farms at harvest and support their farmer/customers throughout Australia; and more targeted and flexible visa categories to fill this gap in skilled workers during surge periods, to reduce reliance on Working Holiday Maker visas. GPA has also supported a 'Paddock-Ready' apprenticeship being delivered through TAFE courses and similar educational institutions, with professional placement on farm, to help with resolving this skills gap, and incentivising young farmers to take up ag-careers.

Whilst we understand the importance of targeting primary, secondary or tertiary students with educational messages, there are also benefits from helping to better educate all Australians – especially consumers who we're told are becoming increasingly concerned about issues they are concerned about but may not properly empathise with, such as sustainability, climate change, food production methods and ethics – with purchasing decisions mostly price-based.



Primary Industries Education Foundation Australia (PIEFA) was established in 2008 to bridge the gap between education, government and primary industries. PIEFA is the leader in food and fibre education, providing Australian students with enhanced knowledge and skills, so they're well-equipped to become the future leaders of our primary industries.

Australia's primary industries are experiencing workforce and labour shortages that threaten to cripple food and fibre production. The solution is through education. When students understand where their food and fibre comes from, through structured and engaging, curriculum-aligned programs, school leavers will be attracted to a career in the industry.

By embedding accurate and relevant knowledge about where food and fibre comes to students at a young age, perceptions of the industry are changing and genuine interest in being a part of the future of farming is gaining traction.

Combined experience, knowledge and skills across PIEFA's Board of Directors and staff is vast and has led to the following successful programs:

#### **PRIMEZONE | The place for all your food and fibre classroom resources**

Through PIEFA's web portal, [Primezone](#), hundreds of curriculum-aligned, high quality, food and fibre teaching resources are available for students from Foundation through to Year 12. In the 2022 calendar year, more than 14,800 food and fibre classroom resources were accessed via Primezone. Teachers utilise the free classroom resources to implement up-to-date food and fibre content in their classroom. Teacher Professional Development is a key component to successful implementation. When teachers clearly understand the content, including background information on the industry, they're likely to become advocates, excited to pass on that knowledge to their students.

#### **PRIMEZONE ACADEMY | Student food & fibre eLearning courses**

PIEFA's [Primezone Academy](#) eLearning portal allows students to undertake free, interactive courses. Designed to help facilitate remote learning and student autonomy, Primezone Academy's courses can be done at each student's own pace and can also be used in home school situations. Formed as an immediate response to the COVID-19 pandemic, Primezone Academy continues to be an incredibly valuable tool – particularly to students in rural regions of Australia.

#### **CAREER HARVEST | Discover rewarding careers and pathways in the primary industries**

PIEFA manages the [Career Harvest](#) website. Career Harvest provides information on careers, scholarships and other opportunities in agriculture, food and fibre – targeted to students, careers advisors and parents/carers. Visitors to the website can view 'a day in the life' videos of employees at various stages of their careers, find scholarships at tertiary institutions across the country, view job boards, and access industry-specific careers information pages. In the 2022 year, the Career Harvest website achieved more than 68,000 views – an increase of 30% from 2021 and a direct result of increased efforts to promote careers in primary industries, stemming from demand. With further

website updates on the horizon to provide more comprehensive information on career pathways, Career Harvest equips students with the tools to gain the skills and knowledge required to succeed.

### **FARMER TIME | Real-world connection between the classroom and the farm**

As a direct connection between the classroom and the farm, PIEFA's national [Farmer Time](#) program allows students to ask questions, take a virtual tour of a farm or participate in live sessions with primary producers. This program has been a huge success and has resulted in a range of pre-recorded lessons that will continue to be used in primary classrooms across the country.

PIEFA is strongly supported by primary industry Research and Development Corporations (RDCs) and other organisations that invest in innovation and leadership in the food and fibre and education sectors. These partnerships provide PIEFA with a direct link and unprecedented access to industry experts.

PIEFA works closely with its members to identify current challenges and priorities for each industry. This, combined with PIEFA's outstanding expertise in education and resource development, ensures outputs and resources are tailored, relevant and industry-specific.

#### **A successful agriculture, food and fibre education program must:**

- Engage teachers and educators from pre-primary up to tertiary level
- Provide relevant support and professional development opportunities for educators, to ensure they're confident in delivering the content
- Closely align with curriculum
- Be able to scale-up and used across a variety of classrooms in all States and Territories
- Be overseen by highly skilled educators, supported by industry experts, to ensure content is relevant and current

PIEFA's programs will continue to evolve and scale-up as funding, resources and support for the organisation increase – ultimately, more is needed. The formula of educating young Australians about the food and fibre industry is working and PIEFA will continue to build on momentum to see our primary industries thrive once again.





## **AUSVEG - The Vegetable Industry Education and Career Programs**

- AUSVEG *Grow Your Career* videos series
  - These videos explore some of the obscure but vital roles in the industry and show the daily tasks, responsibilities, and pathways of current employees on Australian farms – many who have been able to transfer key skills from seemingly unrelated courses and past occupations to start new and successful careers in horticulture. [Horticulture – Grow your career | AUSVEG](#)
- AUSVEG *Growing a Career in Horticulture* career booklet
  - This career booklet created by AUSVEG details 41 careers in the horticulture industry that are in high demand across Australia. The booklet also lists study pathways and Training providers for courses and certificates. [AVG2212001-Careers-Booklet-WEB-March-10-FINAL.pdf \(ausveg.com.au\)](#)
- AUSVEG *Unpacking the Vegetable Industry* video series
  - Too often consumers and stakeholders are only presented through the news media with negative pictures of the vegetable industry, while other times the industry is prominent in the media during floods, drought or other extreme weather events, which once again tends to portray a negative image. The *AUSVEG Unpacking the Vegetable Industry* video series looks to show what the vegetable industry is really like and to tell our story and answer some of the questions the public has for the industry. In this series AUSVEG has travelled around Australia and interviewed people working in the vegetable industry to understand their experiences and perspectives. [Unpacking the Vegetable Industry - YouTube](#)
- VEG Education Vocational Horticulture Program
  - This program has been developed on farm by Catherine Velisha, an industry leader and long-time advocate for horticulture education for school aged students. The program is tailored for senior students looking to gain an understanding of the horticulture industry by combining classroom and hands on learning in industry. Students will learn practical skills and training so they can pursue an exciting career in horticulture. [Course Details | Velisha Education \(vegeducation.com\)](#)
- VegEducation
  - Born out of Victoria's Velisha Farm by CEO Catherine Velisha, VEG Education looks to build a connection between kids and horticulture. Catherine is passionate about education and building a long-term skilled and engaged horticulture workforce. Through the VEG Education program students have the opportunity to visit Velisha Farms in person or virtually to see how their veggies get to their plate! This program can be tailored for primary and secondary students. [VEG Schools | Velisha Education \(vegeducation.com\)](#)
- CSIRO Taste and Learn
  - A primary school program helping to support and foster student sensory learning and enjoyment of vegetables to positively impact their health and wellbeing. [Taste & Learn™ \(csiro.au\)](#)

- Food Ladder
  - Based in Sydney this Australian Not for Profit organisation looks to implement customised hydroponic growing systems in remote and regional locations. Through their online learning platform, they provide training videos, factsheets, and educational resources. [www.foodladder.org](http://www.foodladder.org)
- Kids to Farms
  - Kids to Farms is run by NSW Farmers that provides students in NSW with the opportunity to learn about agriculture through real-world, educational experiences. By connecting schools directly with farms in NSW, Kids to Farms provides syllabus linked learning opportunities for teachers and students to help develop their understanding of food and fibre production systems. [Home - Kids to Farms](#)
- OzHarvest Feast Program
  - A food waste education program for years 5 and 6 (soon to be high schools as well). The program runs for 7-10 weeks and is a STEM project-based learning program focusing on food and fibre and the cross-curriculum priority of sustainability. [Home - Food waste education program | OzHarvest FEAST](#)
- Phenomenom
  - Is a free digital toolkit for teachers that is jam-packed with engaging episodes and lesson plans that incorporate food literacy into every subject. The program was developed by Alice Zaslavsky, a previous middle school teacher and now famed food writer. [Home - Phenomenom Ph-Teacher-Guidebook.pdf \(phenomenom.com.au\)](#)
- Stephanie Alexander Kitchen Garden Program
  - The foundation provides the inspiration, information, professional development and support for educators to deliver pleasurable food education to children and young people in Australia. Pleasurable food education is a fun, hands-on approach to teaching children and young people about fresh, seasonal, *delicious* food so they form positive food habits for life. [Pleasurable food education | Kitchen Garden \(kitchengardenfoundation.org.au\)](#)
- 24 Carrot Gardens Project, Tasmania
  - The 24 Carrot Gardens Project educates children in health, wellbeing, and the importance of lifelong learning. Their vision is to ensure children, young people, and their families are healthy, resilient, and able to achieve their full potential. The project sets the gold standard for school kitchen gardens which invite the entire community to participate in their production, harvesting, and cooking. <https://24carrot.mona.net.au/stories>

The vegetable industry also has a number of passionate growers who are actively engaging with schools on their own means. For example, Pennie Patane at Patane Produce in WA invites school groups onto her farm and educates them about vegetables and their production. Pennie also attends careers nights and looks to promote careers in the sector.



Egg Farmers of Australia represents leading cage, barn and free-range egg farmers and has members across the egg industry supply chain.

Our mandate is to build policy relating to food safety, biosecurity and standards for our industry.

Education falls under our Research and Development Corporation, Australian Eggs but this has not stopped us as we understand the importance of education and investing in the current generation and the next to come.

Our young members are vets, nutritionists, researchers and of course – egg farmers! Our industry group is called **Gen Egg**. ***One third of our members are under 40 years of age and members of Gen Egg.***

#### **A little history about Gen Egg...**

- On the Tuesday 26 April 2022 a group then called Young Egg Industry Leaders Reference Group formed following the inaugural Egg Farmers of Australia Awards in 2021.
- The aim of the group was to meet monthly for casual conversation and to discuss various egg industry topics of interest and to provide mentorship.
- The idea of a virtual forum with egg industry supporters and egg farming youth from other countries was born with the first international virtual forum held on 1 September 2022.
- In September 2022, the group decided to change the name to be more reflective of the group members and changed its name to Gen Egg.
- The group now meets quarterly with a guest speaker each meeting.
- The next virtual forum will be held on the 7 September, 2023.
- Over 2023 our goal is to increase the uptake of mentors and link them with those who would like a mentor.

#### **Other support and training available for people in the egg industry supply chain...**

Australian Eggs supports the continued **growth and development** of the Australian egg industry by providing members with access to **awards & scholarships, training, leadership initiatives** and **capacity building programs**.

Through our collaboration with **farmers, industry experts** and **training organisations**, we provide opportunities to everyone in the egg industry, from **egg farmers** and **supply chain staff** to the **next generation, students** and those interested in joining the industry.

#### **EggStart**

The EggStart induction program is completely subsidised for Australian Eggs members and has been developed for egg farm employees new to the industry or those needing a refresher. It covers up to seven topics which can be undertaken separately or combined into a program suited to your needs. Topics cover biosecurity,

#### **EggTasters**

The EggTasters training program is fully funded by Australia Eggs and facilitated by 4UpSkilling for Australian Eggs members. EggTasters gives egg farms access to short-form training opportunities for their staff, including biosecurity, egg-farm safety, multifactorial shed management and team/staff management. Training can be once-off or scheduled at intervals as part of your ongoing induction welfare, WHS, QA, food safety and more. Topics are reviewed annually to include the most up-to-date research and resources.

### Jeff Ironside Egg Industry Leadership Award

The inaugural Jeff Ironside Egg Industry Leadership Award is for any egg farmer, egg supply chain worker, veterinary or extension specialist or educator to be recognised for their contribution and leadership to Australian Egg Industry. The award recognises the efforts of current and developing leaders in the egg industry and honours the work of

Jeff Ironside. This is your chance to nominate an individual who deserves recognition for the work they (or you) are doing. The winner will be sponsored to participate in the Marcus Oldham Rural Leadership Program in Victoria. The Marcus Oldham Rural Leadership Program is an intensive five-day workshop held in September each year, that allows participants to develop the skills and knowledge to undertake a leadership role in their workplace, the egg industry and their community.

The training program is completely subsidised for members by Australian Eggs and is open for both individuals and egg farms to enrol. Egg farms with a minimum of 10 trainees can also choose to arrange personalised training at a time that suits their schedule. The course will be of interest to people working on commercial egg farms and is suitable for all personnel responsible for managing and handling poultry. It would be beneficial to individuals who work under general supervision, exercise limited autonomy and have some accountability for their own work. This broad training program is made up of three husbandry and welfare modules: • Bird health and welfare • Animal care • Biosecurity management of new starters.

### Husbandry and Welfare Training

### Management Trainee Program

The Australian Eggs Management Trainee Program is for any egg farm employee or egg supply chain worker looking to take the next step in their career in the Australian Egg Industry. The Management Trainee Program will sponsor two successful recipients to complete a Certificate IV in Leadership and Management, contextualized for the egg industry. The Certificate IV in Leadership and Management is delivered by 4 Up Skillling and can be delivered online or in person. Participants will complete 5 workshops of clustered units and a range of task and assessment that can be spaced out over one or two years, to fit with the participants workload. Units of competency that will be covered in the Certificate can be modified to suit the needs of the participant and their role within the farm business.

### Australian Rural Leadership Foundation

Twice annually, Australian Eggs is supporting scholarships for emerging leaders in the Australian Egg Industry through the Australian Rural Leadership Foundation. Two successful recipients will be sponsored to participate in their choice of the **TRAIL** Emerging Leaders program or the **Australian Agribusiness Leadership Program**.

**TRAIL** is a cross-sector, challenge-based leadership program for Australia's emerging rural leaders. The program takes diverse people from different occupations, communities and backgrounds and expands their leadership skills. The program includes a challenging four-day outdoor leadership experience, along with numerous workshops, panel sessions and seminars aimed at building and developing leadership skills.

The **Australian Agribusiness Leadership Program (AALP)** is a bespoke development program for agribusiness leaders, committed to their sector and to increasing their impact in the businesses and communities in which they live and work. The 11-day program initiates structured pathways for future leadership development and is an opportunity to meet and learn with influential agribusiness leaders and examine the complexity, challenges and opportunities for the Australian agribusiness sector.

### **Young Farmer Conference Bursaries**

Australian Eggs recognises the wide variety of egg industry, agri-business and agri-production conferences held annually in Australia. Open to 18 to 40-year-olds, Australian Eggs will offer up to four travel bursaries each year to attend a conference of your choice within Australia (approved by Australian Eggs). The bursary will be used to cover conference entry, travel and accommodation. All recipients will be encouraged to share their learnings with Australian Eggs members.



## Good Meat Schools hub

The Australian [Good Meat Schools hub](#) helps to improve teachers and students' understanding of the Australian red meat and livestock industry by delivering a range of curriculum-linked resources and programs. Working in collaboration with education experts, MLA's school education program is key to bridging the gap for Australian educators and students to learn more about where their red meat comes from and the Australian red meat industry. All of our resources are free and available on [goodmeat.com.au/education](http://goodmeat.com.au/education)

## Teaching resources

Australian Good Meat's [teaching resources](#) provide educators with over 170 cross-curricular materials for use across Foundation/Prep to Year 1. Developed in collaboration with the [Primary Industries Education Foundation Australia](#) the materials are designed in a 'ready-to-teach' format, and supported with supplementary classroom posters, card games and teacher guidance videos to support teacher adoption. Free and accessible via an easy [search filter](#) the materials are useable in both digital and hardcopy format. Aligned to the Australian Curriculum 9.0, the resources include a focus on Sustainability as a curriculum priority area and cover key aspects of the red meat and livestock industry including:

- red meat production
- animal welfare and environmental management
- the supply chain
- marketing and advertising
- red meat nutrition

## Virtual classrooms

Australian Good Meat's [Smart Farming virtual classroom](#) has been educating Australian primary school students for over twelve years and is one of our most popular and effective school education programs. This free, interactive and curriculum-linked program brings a red meat producer into the classroom for students to engage via a livestream session. Each 30-minute session is facilitated by a qualified teacher and includes student quizzes and Farmer Q&A chat time. The sessions are supported with pre and post learning via activity sheets and a Kahoot program, along with vocabulary key word lists. Hosted at regular intervals across the school year, the virtual classroom is tailored for both lower and upper primary students with these classes on offer:

### **Farm Life (F-2 class)**

Provides lower primary students with an introduction to farming, life on the farm, who works on the farm and how to care for the animals.

### **The Sustainable Farm (Year 3-6 year bands)**

Explores how farmers care for their environment and their animals along with the benefits that come with using sustainable farming practices.

### **Technology on the Farm (Year 3-6 year bands)**

A focus on how farming technology has changed over time, the types of technology farmers now use and how these technology advances improve a farming business. Learn more about Smart Farming Virtual Classrooms at [www.mlavirtualexcursions.com](http://www.mlavirtualexcursions.com)

## Be Your Greatest virtual classroom resource hub

The Be Your Greatest series was a live virtual classroom hosted by Australian Beef in the lead up to the Tokyo Olympic Games aiming to highlight health and well-being for primary school students. We believe healthy minds and healthy bodies are fundamental to ensure students are at their best! We've created this resource hub to access the session video recordings showcasing Australian Olympic and Paralympic heroes inspiring primary school students to stay mentally and physically fit while cooking up their favourite Australian beef meals with Chef Matt Sinclair.

Programs that MLA invests in to build industry capability through our industry leadership investments (with the objective developing enhanced leadership capability and developing impactful industry ambassadors) include;

- Horizon Scholarships – two undergraduate scholars annually <https://agrifutures.com.au/people-leadership/horizon-scholarship/>
- Nuffield Australia Program ( > 20 years ) – 1 scholar annually <https://www.nuffield.com.au/>
- Zanda McDonald – one Scholar annually <https://www.zandamcdonaldaward.com/>
- Australian Beef industry Foundation - Marcus Oldham Rural Leadership Program – 3 scholars annually <https://marcusoldham.vic.edu.au/courses-enrolment/leadership/the-program>
- Australian Rural Leadership Foundation Program ( > 20 years ) a significant number through various MLA programs across the years – now consolidated at two annually <https://rural-leaders.org.au/>
- MLA has provided Ambassadors for the Red Meat Industry training courses to over 200 participants since 2020, with another year of training planned this financial year [MLA Ambassadors for the Red Meat Industry Program | Meat & Livestock Australia](#)
- Through MLA's support for the Peak Industry Councils, MLA has sponsored the [CCA Rising Champions program](#), sponsors a few of the [ALFA leadership programs](#) such as the [ARLP](#) and [TRIAL](#) , and also sponsors similar programs with Sheep Producers Australia and Goat Industry Council Australia

Through our school education program we invest in the following programs and activities:

- Educating school students through virtual classrooms with producers facilitated by teachers via Kimberlin Education: [KE Teacher Event: Smart Farming Virtual Classroom](#). Sessions are held each school term, with 20 sessions hosted over last year.
- Provision of [school education resources](#) and digital resources such as the [Virtual Reality 360 Tours](#) (including a segment in the Beef VR involving ACC processing plant) – for using in the classroom or via VR goggles.
- Education and career development information provided through links to [ALFA's FeedlotTech](#) and [AMPCs career and education resources](#)
- Provision of [lesson plans and resources](#) for teachers and students - all materials are currently being updated, with over 400 items due to be launched late Term 3 / early Term 4 of the school year. These have been developed by teachers for teachers and students aligned to the new school curriculum.
- Founding members of the Primary Industries Education Foundation of Australia ([PIEFA](#)) which provides coordination of initiatives to encourage primary industries education in schools through a partnership between industry, government and educators
- Through the Royal Shows – we support and participate in the school education program, with sessions hosting schools into the Australian Good Meat paddock to plate Igloo experience – next will be at the Ekka where we'll be hosting schools at the Australian Good Meat stand with loads of educational material – with MLA staff and Red Meat Ambassadors involved in hosting the sessions / school visits.





AUSTRALIAN LIVESTOCK  
EXPORTERS COUNCIL

## The Shipboard Stockpersons Accreditation Program

By Scott Kompo-Harms

Deputy CEO, Australian Livestock Exporters' Council

In August last year, I was fortunate enough to head up to Darwin to undertake a shipboard stockpersons training course, run through LiveCorp.

The Shipboard Stockperson Accreditation Program commenced in 1998 with separate training for both sheep and cattle. The training was reviewed in 2011 as part of an R&D project by Dr Tristian Jubb and was consolidated into one course covering four days with practical and theoretical components.

In total, twenty courses have run since 2011. This year was the first time it was run out of Darwin, with a new focus on cattle and the nascent live buffalo export industry. It was also run in conjunction with the Young Livestock Exporters Network (YLEN).

The course has adapted over time to suit the current climate and there have been some significant challenges along the way. It was delivered as a virtual course during COVID and in 2022, the course shifted to Darwin. This was an opportunity to develop a new, more comprehensive buffalo component thanks to AgriFutures Australia providing a grant for buffalo capacity building.

The course is typically delivered by four presenters, all with years of experience in the industry in different roles.

Some participants started their livestock careers by doing the course, going on voyages as an onboard stockperson and then being employed by an exporter to become some of today's influential leaders of the industry like John Edwards, John Cunningham, Pat Coole, Tim O'Donnell, Kari Moffat, Ollie Thorne to name a few. There are many others!

As with many courses these days, we were also fortunate enough to have staff from the Department of Agriculture, Fisheries and Forestry who work in developing relevant policies for, and administering, livestock export regulation.

The course topics include:

- Life on a vessel
- Joining the crew on a vessel
- Shipboard personnel
- Loading
- Animal welfare, the Australian Standards for the Export of Livestock, and the Exporter Supply Chain Assurance System
- Cattle, sheep and buffalo diseases and treatment
- Low stress stock handling
- Ventilation and managing the risk of heat stress
- Discharge overseas



The course is a great mix of theory and practice and we were fortunate enough to visit a cattle and buffalo station – Annaburoo – and Berrimah export yards.

My motivations to attend were a desire to become more intimately familiar with the live export industry, in a practical sense, and to learn about live export regulation and how it is applied in an operational, day-to-day sense. One of the unexpected benefits was meeting a really diverse bunch of young people who have a real passion for this industry and agriculture in general. One of those people attending the course was Tam Michalek.

For those unfamiliar with that name, Tam and her business partner Chloe Grant (also a graduate of the course) are the two youngest holders of an export licence and recently sent their first consignment of cattle to the Middle East, which is no mean feat! I've got no doubt that we'll see great things from these two in the months and years ahead. Both Tam and Chloe are active members of YLEN and, like the other names I mentioned earlier, are emerging as true leaders in the industry, sharing their experiences and paying it forward to the next generation.

The course itself exceeded my expectations on all accounts. As someone who has spent the bulk of their working life behind a desk, it was honestly one of my most illuminating and enriching experiences.

Some of the highlights were:

- Seeing buffalo up close in a yard for the first time at Annaburoo station
- Being taught the theory of low stress stock handling and getting the opportunity to put that into practice at the Berrimah export yards.
- Handling a westergun (device used to safely inject livestock with veterinary drugs – for both the animal and the stocky!) for the first time.
- Observing an experienced cattle veterinarian perform an autopsy on a recently euthanised heifer which, despite having few outward symptoms other than general malaise, was suffering from a badly infected kidney.

The presenters were able to share their experiences and gave great helpful tips, such as putting together a medication kit in a waterproof bag, always carry a small amount of US dollars in case you get into trouble in a foreign country and how to fit in with an overseas based crew.

As part of the course, we were given access to a series of videos that showed all of these activities but there is nothing like seeing it in person, while being instructed by some of the best in the business. Was it confronting? At times, yes, but did I come away feeling like I understood the job of a shipboard stockperson? Absolutely. Did I feel like I understood what it would be like on board a ship and performing these duties? For sure.

The course gives young people opportunities to get a start in live exports and build a career in other parts of the industry. It gives young people options for employment throughout seasonal periods when land-based agricultural employment is less prevalent. It also lets people see parts of the world they would never get to see as a tourist.

This accreditation program is so much more than just a four-day course. Course graduates are critical to our industry – having enough well-trained stockpersons performing their jobs with diligence and care is so important. They are the frontline workers in the industry delivering Australia's world-leading animal welfare standards and to see that next generation up close was so inspiring.



### *GRDC/PIEFA: Educating with Australian Grains Program*

Founded in 1990, the Grains Research and Development Corporation (GRDC) invests in research, development, and extension to create enduring profitability for Australian grain growers. To support the grains industry, it is critical that there is a pipeline of researchers in engineering, agriculture and science who are focused on grains.

To encourage and support that pipeline, GRDC became a member of the Primary Industries Education Foundation of Australia (PIEFA) in 2021 with the aim to:

- 1) Attract new talent to embark in a career in grains RD&E.
- 2) Develop targeted career resources for in-class use/activities and for the professional development of teachers to help them understand careers in the grains industry from research to agronomy to farming.
- 3) Encourage divergent thinking about grains from an early age.
- 4) Develop new grains resources for secondary schools targeting years nine to 12, a critical period in which students actively make career decisions.
- 5) Recognise key influences of career pathways.
- 6) Support teachers nationally to have improved confidence and knowledge to effectively implement food and fibre education in schools.

### *EDUCATING WITH AUSTRALIAN GRAINS*

PIEFA, together with GRDC, has developed educational resources that help schools, families and communities learn about Australian grains, including how they are farmed, the lifecycle of a grain seed, and how grain is made into foods like bread (cereal), vegetable oil (oilseed) or hummus (pulses). Each unit is curriculum-aligned and contains:

- research activities;
- hands-on experiments;
- quizzes; and
- extension activities.

Some of those resources are available as [e-learning courses on the PIEFA platform](#). They teach school students about the Australian grains industry and make them aware of high-tech problem-solving career options in the grains industry. These courses cover topics such as soil water storage, sustainability, and precision agriculture.

For example, for those in [years three to four, courses called ‘Sunflower Stories’ and ‘Grains: Paddock to Plate’](#), were developed to help students understand the life cycle of sunflowers and other grains, oilseeds and pulses that comprise the Australian grains industry. A more detailed course and another set of lessons under the banner of [‘The Science of Living Soils’ is available for children in years five and six](#). [‘Intro to Oilseeds, Grains and Pulses’ provides engaging activities for students in years five to eight](#), while a more in-depth course called [‘Investigating and Managing Soils’ was written to help year seven and eight](#) students take a deeper look at soils.

In developing these resources, it was acknowledged that teachers are time poor and need quality resources mapped to the Australian curriculum to address students' knowledge gaps. Teachers in schools with poor internet connectivity can access the learning resources as PDFs downloadable through PIEFA's website.

PIEFA and GRDC have also developed an [informative poster](#) that details the regions across Australia where grains are grown, demonstrating the supply chain from wheat to bread, plus a calendar of operations. This highly visual learning tool is designed to engage students in food and fibre learning.

In addition, GRDC is part of the PIEFA [Farmer Time](#) initiative that helps students understand more about where their food and fibre comes from. This tool allows primary and secondary school students to ask questions, take a virtual tour and experience in a real-world context different career options in Australian food and fibre production.

All grains resources are available on the PIEFA grains landing page: [www.primezone.edu.au/grains-education](http://www.primezone.edu.au/grains-education).

#### *EDUCATION RESOURCES IMPACT*

An estimated 2850 schools have engaged with PIEFA by subscribing to its newsletter, following PIEFA on social media, accessing Primezone resources, using eLearning via Primezone Academy, and participating in the Farmer Time classroom sessions and the Knowing and Growing sessions.

Just for Farmer Time alone, between July 2012 and June 2022, 4800 students and 210 educators across 45 schools **used** Farmer Time through 75 sessions (including pre-recorded, one-on-one, and national live sessions).

#### *DESKTOP REVIEW OF CURRENT AUSTRALIAN GRAIN, OILSEEDS AND PULSE RESOURCES*

GRDC commissioned an audit of education resources that was updated in November 2022. This audit revealed there were a significant number of grains (including cereals like wheat, oats and barley) education resources available to teachers and students across Australia. Resources related to oilseeds and pulses are not as prolific.

The main access points for these resources are Primezone and Primezone Academy. Together, these websites house 28 resources that can be used when teaching about grains, oilseeds and pulses.

The feedback from this audit was that the resources need to be 'packaged' into user friendly units of work to be more readily used by educators. Any resources need to be accessible digitally, easy to navigate by students and be interactive and informative.

The audit also found virtual farm experiences were an excellent way for grain, oilseed and pulse information to reach more classrooms. During this audit it was noted that currently there are no opportunities for virtual grain farm experiences.

GRDC will use its PIEFA membership to investigate how the recommendations from this desktop review can be pursued.

#### *CAREER DECISION-MAKING*

PIEFA through its website career harvest also has a dedicated "Careers in Grain" hub that provides videos about the day in the life of a grain producer and an overview of the plethora of job opportunities in the grains industry. This page has had input from multiple organisations across the grains supply chain, not just GRDC: <https://www.careerharvest.com.au/careers-in-grain>



Australian Pork Ltd (APL) is a producer-owned industry body working every day to represent Aussie pig producers. Existing to enable a thriving pork industry for all, APL has the vision to make pork Australia's preferred choice of protein, sustainably adding \$1 billion to farm gate value by 2025.

Critical to achieving this will be ensuring the Pork Industry has a strong pipeline of the next employees, specialised service providers and business owners. APL continues to invest significantly in both career awareness and education resources.

### **APL Careers Portal**

APL has invested in the development of a Careers pathway tool. While careers in the pork industry are diverse and utilise a wide range of skills – from animal handling and husbandry to trades, mechanical skills, science and business – this is largely unknown by prospective employees and students. APL's careers pathway tool allows industry to showcase the wide range of opportunities available while facilitating students, educators and prospective employees to see the varied jobs that are available in the pork industry. The tool also provides guidance on average salary range and what experience, skills or education would be required, as well as stepping users through specific career paths offered in the pork industry.

Ideal for school leavers and students wanting to understand the career opportunities available, the tool directly links to Seek and other recruiting sites, allowing users to see current job vacancies for roles they are interested in.

### **In-School Curriculum**

APL has developed and promoted in-school resources, working closely with Primary Industries Education Foundation Australia (PIEFA). This long-standing and strong relationship has delivered curriculum that aligns with the 'Food and Fibre Production in Design and Technologies and Science' (Australian Curriculum) as well as state specific curriculums. Over the last 12 months PIEFA have supported the redevelopment of our suite of educational resources – from foundations through to Year 12.

### **Virtual Tour**

A producer-led initiative, APL's virtual tour of the Australian pork supply chain tells their stories from piggery to plate. Integrated into APL's in-school resources and a stand-alone offering, the tour provides a 360-degree interactive view of the facilities and processes that go into producing the high-quality pork products on our shelves. It has been designed to complement a wide range of primary, secondary and university level curriculums and get students 'on farm' without the challenges of biosecurity or travel.

The tour is an engaging and interactive resource to support teaching of agriculture, food and fibre production allowing students to experience the 'farm to fork' process in a virtual form.

### **Tertiary Education engagement and Careers awareness**

APL has developed strong relationships with Australian universities, particularly those who deliver agriculture-based programs. These relationships provide opportunities to support and promote the pork industry at careers fairs and contribute to course content delivery.



APL is a long-term sponsor and contributor of the Intercollegiate Meat Judging Competition (ICMJ), bringing Agriculture, Agribusiness, Animal, Vet and Food Tech students, as well as lecturers from across Australia and internationally together. The students compete in pork carcass judging, undergo professional development and take part in networking activities during the event. They also attend a large careers expo. This event continues to provide APL with opportunities to actively promote and educate university students through presence at the careers expo, presenting awards and participating on industry panels.

### **Scholarships**

Australian Pork each year provides university industry placement scholarships for students who, as a part of their university course, undertake a learning placement within the pork industry. APL also grants scholarships to undergraduate and postgraduate research students, encouraging students and academics to contribute to the high calibre of research that the pork industry is known for, resulting in improved on farm outcomes and supporting a thriving industry.

## Schools Engagement Program Overview

Dairy Australia has a long history of delivering school programs aimed at educating primary and secondary students, teachers and parents about the Australian dairy industry. The 'Discover Dairy' program of work focuses on increasing student awareness of where dairy foods come from, the role of dairy foods in a healthy, sustainable diet, and the variety of dairy careers available in the industry.

The current curriculum offering is largely targeted to primary school, with a number of sustainability resources developed for years 7 to 10, and regional careers initiatives delivered to years 9 and 10.

An estimated 850,000 students are reached through Dairy Australia's Discover Dairy schools program of work each year, and it is well recognised and trusted amongst teachers with 9 out of 10 agreeing they would strongly recommend Discover Dairy to another teacher.

## Dairy Australia Schools Initiatives

### Discover Dairy

The Discover Dairy Curriculum hub [dairy.edu.au](http://dairy.edu.au) provides free curriculum linked resources to bring the Australian dairy industry into the classroom and help teachers deliver to Food and Fibre, and Food and Wellbeing curriculum frameworks.

Dairy topics such as health and nutrition, sustainability, dairy history, farm to plate and industry careers are integrated across all areas including art, maths, English, health and PE, LOTE, science, technologies, geography and humanities. Dairy Australia is currently updating all resources to ensure links to the new Australian curriculum 9.0.

The website receives approximately 150,000 resource interactions (resource downloads, interactions, and videos views) a year.

### Picasso Cows

Picasso Cows is a free curriculum-linked program designed to educate primary school children about the Australian dairy industry that has been running since 2008.

Participating schools receive a blank fibreglass cow to be designed and decorated, while learning about the Australian dairy industry. The program is supported by a suite of curriculum linked resources for teachers, found on the Discover Dairy website, across two key themes of Farm to Plate and Health & Nutrition.

Schools create a Picasso Cows learning journal, documenting and showcasing students' learning and engagement with their chosen theme. Participating teachers receive access to the Picasso Cows member dashboard, which houses everything teachers need to successfully complete the program.

The program is run in approximately 100 schools a year across terms 2 and 3. Surveys show that 95% of teachers agree their students have a better understanding of the health and nutritional benefits of dairy foods for strong bones since participating in the Picasso Cows program.

### Virtual Reality

In 2022 Dairy Australia launched new Virtual Reality technology for schools, including:

- A 360 virtual farm tour video explaining how grass is turned into milk.



- Two interactive Virtual Tours – one focused on sustainability, and the other on careers in dairy.
- And a new render of a 3D cow to track the journey of the grass through the cow.

The videos are available on the Discover Dairy website but are best viewed in VR headsets. For schools that already have headsets, an App has been developed so that schools can download the content directly. Each of our eight regional offices also have two headsets each which are taken into local schools and career expos.

A dashboard is currently in development to help track and measure engagement with the technology in schools.

### **Virtual Classrooms**

In 2021 Dairy Australia piloted 'Virtual Classrooms' which connects teachers and students to our farmers in real time.

The curriculum-linked sessions introduce students to topics such as jobs on dairy farms, how dairy foods are produced in Australia, technology, sustainability, and the health and nutritional benefits of consuming dairy.

The pilot was undertaken with Farmer Ambassador Bonnie Ravenhill, who livestreamed into classrooms using her iPad and walked the students through her farm, answering their questions in real time. The 45-minute lessons engaged 36 schools, reaching over 1,000 students and 72 teachers.

The activity is currently paused due to resourcing constraints but will be considered as part of future plans.

### **Workforce Attraction**

In 2022 Dairy Australia's implemented a two year Workforce Attraction program which aims to attract new entrants to work in dairy farm jobs. In addition to running the *Dairy Jobs Matter* campaign in dairy regions, Dairy Australia has employed eight Workforce Attraction leads to support delivery of the program in the dairy communities. This includes building relationships with local schools to promote dairy as career option through school incursions, career expos and Ag teacher conferences.

A suite of dairy careers resources have also been developed to give to students, and are also housed on a new landing page on the Discover Dairy website alongside video's, testimonials and FAQs related to working in dairy.

## **Education Partnerships**

### **Cows Create Careers**

Cows Create Careers aims to raise awareness and interest of secondary school students in dairy careers. The program is run by Jaydee Events, with sponsorship from Dairy Australia and other industry organisations.

Through the program high school students build skills through raising a calf, and undertaking research and projects aligned to the curriculum whilst being introduced to industry advocates who explain the variety of career opportunities in the dairy industry.

The program draws on Dairy Australia's career resources, and students who show an interest in a dairy career are referred onto the Dairy Australia regional work force attraction leads for more information around career pathways.

Cows Create careers has been running for 17 years and has reached nearly 150,000 students during this time.

#### **Life Education**

Dairy Australia currently has a partnership with Life Education Australia to help reach Primary School aged students and educate them on the role of dairy foods as part of a healthy diet. Life Education employs over 134 educators in Australia who visit 4,300 schools and reach over 700,000 students a year,

As part of the partnership, Bone Augmentation technology was developed for Healthy Harold vans as a tool to help educate Australia students about the benefits of dairy consumption for bone health.

Dairy Australia and Life Education also collaborate on campaigns to reach teachers, students and parents including:

- *Australia's Healthiest Lunchbox*: Promoted the importance of healthy habits for kids and educating parents about the safe storage of dairy in kids lunchboxes and sharing lunchbox ideas.
- *Healthy Bones Action Week*: Encouraged kids to get creative and making a breakaway banner that includes the three key steps to building strong bones.
- *Cooking Class with Harold*: School holiday activity with Healthy Harold including cooking videos that demonstrated easy ways to get an extra serve of dairy.
- *World Milk Day*: Developed content including rainbow smoothies with Harold video.

Campaign activity includes Facebook events, social amplification, content shared through the Kids News Life Ed newsletter and evergreen video content on Discover Dairy and Life Ed websites.

#### **Primary Industry Education Foundation Australia**

Dairy Australia is a PIEFA Industry partner which includes:

- Monthly meetings with Ag industry members
- Contribution to national PIEFA teacher and student surveys
- Promotion of Dairy Australia's education resources and information on Primezone and Careers Harvest and through the PIEFA e-newsletter
- Participation in the Farmer Time program during the year and during National Ag Day.
- Participation in the annual teachers conference.

#### **Ag in a Box - NSW**

Ag in a Box aims to lift the lid on a world of agriculture for school students, by providing teachers with a box of educational resources that by align with the NSW school curriculum. Funded by the Australian Government's Building Landcare Community Capacity Program, Ag in a Box is by the Royal Agricultural Society of NSW.

Dairy Australia has provided in kind support of the program through provision of Discover Dairy resources and activities to include in the dairy boxes.



14 April 2023

The Australian Dairy Products Federation (ADPF) is the national peak policy and advocacy body representing the post farm-gate members of the Australian dairy supply chain, including processors, traders, and marketers of Australian dairy products. Together with our industry counterparts – Dairy Australia, Australian Dairy Farmers, and the Gardiner Foundation – we are committed to attracting and retaining an engaged, competent, and reliable workforce.

The Australian dairy processing industry offers fantastic career opportunities, with the diversity and breadth to be able to be located regionally, contribute to local economies and social fabrics, but also affiliated with global companies and the associated career and succession opportunities this presents.

The Australian dairy processing sector produces a wide range of commodity and specialist value-added dairy food products, including fresh milk, flavoured milks, cheese, powdered milk, cream, yoghurts and butter, dairy desserts, infant formula and wide range of high value food ingredient dairy fat and protein-based products.

The processing of these products in Australia makes an important contribution to the Australian economy and generates significant jobs throughout the supply chain. The technology employed to produce these products is ‘world best’ and demands a higher proportion of skilled labour than most food processing systems because of the need to operate and manage sophisticated high output equipment. Approximately a quarter (23%) of the dairy processing sector’s workforce was categorised as being in the two highest skilled categories of jobs<sup>1</sup>.

Whilst automation and digitalization of processing systems are generating new opportunities, the dairy processing sector is, however, experiencing severe labour pressures across the board. Access to a skilled and capable workforce is limiting production capacity, particularly in regional Australia which comprises more than half the sector’s direct workforce (56.5%).

Data from the Australian Bureau of Statistics has confirmed a shift away from manufacturing-based industry jobs towards service-based industry jobs such as in healthcare, professional services, education, and others. This suggests that some aspects of the dairy processing environment may be seen as less attractive to prospective employees and the impact of this is that the previously stable and reliable workforce associated with the dairy processing sector is becoming more transient, resulting in an increased need to bring ‘new’ people into the industry. In 2021-22, almost three-quarters (73%) of recruits were ‘new’ to the sector.

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<sup>1</sup> Deloitte Access Economics (2021) Economic and Broader Contribution of the Australian Dairy Processing Industry

With increasing expectations around issues such as food safety, product quality, and employee safety and working conditions, customers, regulators, and consumers are demanding higher levels of transparency and accountability through the supply chain.

This changing landscape has created significant challenges in meeting the training and development needs of the dairy processing workforce, both today and into the future. The training systems and capability do not exist currently to service this training demand at the level required. We attribute this at least in part to inadequate internal systems and deficiencies in the external training frameworks to meet the need of the sector.

Acknowledging the key challenges of attracting new workers to dairy processing and ensuring these workers have the right capability and skills mix to succeed, the ADPF created a Workforce Labour Project: the ADPF [Labour Report Dairy Processing Workforce – Issues and Challenges](#), completed in December.

The Report identified five opportunities to address workforce issues and challenges and support improvement in the workforce situation for dairy processing:

1. **Building capability within the processing sector:** focused on addressing the issues related to the delivery of priority training services to dairy processing in Australia, so that all parties can reach their potential domestically and as exporters of high-quality dairy products.
2. **Increasing access to skilled labour:** which includes broadening visa's options; expanding the National Skills Priority Occupation List; and enlisting new ways to 'attract workers' to the sector and the diversity and breadth of career opportunities available (i.e., 'demystify' the dairy processing workplace).
3. **Improving the flexibility and attractiveness of dairy manufacturing workplaces,** including the surrounding community infrastructure.
4. **Identify opportunities in technology and automation,** to improve productivity.
5. **Providing support for capital investment:** understanding the funding and co-investment opportunities are available, to encourage investment in modernising dairy manufacturing systems.

The second phase of this project has now begun, looking specifically at training solutions for dairy processing, both now and into the future.

Through submissions<sup>2</sup> and advocacy, we are calling for collaborative employment solutions to support a viable and competitive dairy processing industry that invests in people and innovation, with a specific need for skilled labour – particularly in regional Australia.

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<sup>2</sup> [Employment White Paper – Terms of Reference](#) (November 2022); [House Standing Committee on Agriculture Inquiry into Food Security in Australia – Terms of Reference](#) (December 2022); [House of Representatives Standing Committee on Industry, Science and Resources – Terms of Reference](#) (Developing Advanced Manufacturing in Australia) (March 2023)



## CANEGROWERS

For more than a century, the sugar cane industry has been the beating heart of many Queensland regional communities. From Rocky Point on the northern Gold Coast to Mossman in Far North Queensland, the industry spans more than 2000km of Queensland coastline, employing thousands of people and contributing more than \$2.5 billion to the economy.

Today the industry is on the cusp of an evolution, as we work towards becoming a major player in Queensland's burgeoning bioeconomy, while also remaining one of the world's largest exporter of high-quality, sustainably produced raw sugar.

A versatile and fast-growing crop, sugarcane has huge potential to be the feedstock for products such as biofuels, sustainable aviation fuels, and bioplastics.

The industry is already a major generator of sustainable, green electricity, and in the coming decades could play a significant role in helping Australia reach its greenhouse gas emission reduction targets. Career opportunities in the industry are many and varied. From working in the paddock, operating farm machinery, to careers in agronomy, research and development, milling operations, sugar marketing and trade, laboratory technicians and chemists, sugar terminal operations and logistics, policy development advocacy, communications, and so much more - there is something for everyone in Queensland's sugar industry.

CANEGROWERS, the peak body representing Australia's sugarcane growers, is a member of the Primary Industries Education foundation Australia (PIEFA). Together with PIEFA we have developed free, curriculum-aligned teaching resources, which we have made available to teachers and schools across the country.

Our primary school education resource, [One Plant, Many Products](#), targets Years 5-8 science, design and technology, and geography curricula with a fantastic introduction to cane growing, milling, sugar production, and value-adding of the product.

Currently, CANEGROWERS is working with PIEFA to develop two new sugarcane curriculum-aligned resources which target students in Years 9-10 and Years 11-12.

CANEGROWERS has 13 district offices located in cane-growing regions along the east coast of Queensland to support grower communities.

Our district offices are leading the way in connecting with teachers and schools within their communities. They are building collaborative partnerships in both primary and secondary schools to bring the industry into the classroom and help inspire and connect students to the industry.

Sugarcane growers and industry representatives visit students to talk about the industry and discuss the diverse range of career opportunities available. Growers also encourage and host farm visits in some districts for a firsthand look at what life is like growing sugarcane in Queensland.

CANEGROWERS works collaboratively with industry and government stakeholders to actively bring agriculture and careers into the classroom and beyond. We access a wide variety of industry partners and contribute to agricultural groups and committees on education, careers, skilling and training, and workforce.

Most recently, CANEGROWERS contributed to the [Careers in Agriculture Magazine](#) developed by the Queensland Farmers Federation (QFF), the Rural Job and Skills Alliance, and Queensland Government. The magazine showcases the many career opportunities available and features real life stories and careers pathways in agriculture and the sugar industry.

Our goal is to build the connection between industry and schools through education.



Representing individual grower members across Australia, GrainGrowers has run a number of capacity building and agriculture education programs. These include personal and professional development programs to empower the grower leaders of today and tomorrow, as well as community education initiatives designed to bridge the knowledge gaps between the public and what happens on farm across Australia.

#### **Australian Grain Leaders program (AGLP)**

AGLP is a 12-month program with face-to-face elements and multiple individualised one on one phone sessions. The AGLP is based on an integrated model of leadership knowledge, skills development, enterprise and industry engagement, and application. Throughout the program the program facilitator will mentor individuals through their leadership journey and discuss the progress of the individual's project.

#### **Grains100**

There can be misconceptions or a lack of understanding about what a grower does on-farm. The Grains100 program is breaking new ground for the agricultural sector and has been designed to ensure that growers who are influencers and leaders can enhance their skills around engaging in critical discussions.

As an industry, agriculture has some complex challenges that need to be communicated across communities that may be unfamiliar with them. Being able to use your voice to raise awareness and build connections with different audiences about the experiences of grain farming in Australia is an essential way of ensuring our industry is understood by the media, with government decision-makers and communities right across Australia. There is development across four key areas:

- further developing high-level leadership skills
- honing advocacy skills with the confidence to engage on all levels about grain production.
- confidence in communicating industry issues and sharing industry success stories.
- further developing stakeholder engagement skills and technique

#### **Innovation Generation**

Innovation Generation is a conference for those working in agriculture aged 18 – 35 that brings together the brightest and best speakers with real-world experience. Join the discussions around farms of the future, collaboration, entrepreneurship, and maximising innovation.

#### **Farm Safety**

GrainGrowers Farm Safety course aims to provide practical, useful tools for grain growers to improve their workplace health and safety practices on the farm, particularly around machinery. This project has been made possible through the National Farm Safety Education Fund and is a partnership between Grain Growers Limited, House Paddock Training and Ben White and Josh Giumelli.

#### **OnBoard program**

The OnBoard program was developed by GrainGrowers after recognising the depth of talented growers capable of making significant contributions to the sector, yet lack of grower applicants for industry boards. The program is comprised of hard and soft skills training by expert facilitators as well as funding participants to complete the Australian Institute of Company Directors course.



## AgForce Queensland with CQUniversity Agri-tech Education.

There is an increasing disconnect between rural and urban populations and with this brings a lack of knowledge as to how Australia's food and fibre is produced - how it makes it from the paddock to the plate, farm to fibre or crop to cup. The project aimed to improve food and fibre production knowledge and appreciation of the importance of agriculture to Australia in primary school students in Queensland.

Educational resources alone are not enough to fully engage students and teachers and the involvement of the agriculture industry is important in building their social licence to operate into the future. Providing students and teachers with a suite of activities and experiences including on-farm or primary production worksite visits, curriculum aligned hands-on activities and pre and post visit engagement in the classroom helped impart a deeper understanding of where their food and fibre comes from.

Other events included food and fibre 'mini classrooms' at major events for groups of students; 'AgConnect' days for primary students to learn about a broad range of agricultural industries and careers in one place and satellite and virtual technology or other 'in-class' experiences including 'Farmer in the Classroom'.

### Students



Over 6890 Queensland students participated in Kids to Farms with over 2900 completing at least one survey.



Students from 129 schools throughout all Education Queensland regions of Queensland were involved in the project.



Of the surveyed students most stated that participation in the Kids to Farm activity was lots of fun (61.7%).



The project's aim was achieved, with most activities successful in increasing student knowledge of each agricultural sector. The Sweet Science module had the highest mean knowledge score for each of the three questions (89.6%).

### Teachers

Teachers are vitally important in ensuring the next generation workforce have the knowledge, awareness and skills of the diverse career opportunities available to them in agriculture.



485 teachers were involved in the project with 133 completing at least one survey.



Over 90% of teachers agreed or strongly agreed that they had enjoyed the Kids to Farms activity and that they found the activity engaging.





Nearly 95% of teachers stated that they learned something from their participation.



76% stated that they now had more confidence to teach food and fibre concepts in the classroom.

Comments from teachers regarding best part of K2F for the students:



“[Learning about] how different grains are used in foods. I had a text message from a parent to say that their child found the word sorghum on a food package and had then begun to go through the pantry to find other grains”.

“The classroom was in a real-life setting”.

“Getting out of the classroom and enjoying a day on farm”.

Comments from teachers regarding best part of K2F for themselves:



“Seeing the joy and amazement on the kids faces. I was shocked at how little they did know”.

“Learning alongside the students!”.

“The variety of topics and activities introducing new ideas for the classroom and integration”.

“Being able to link in with concepts we have taught”.

Agriculture Careers



Most students exhibited no difference in their likelihood of pursuing a career in agriculture between pre- and post-activity surveys. Yet, for those students that did change, an increased likelihood for career pursuit was more prevalent than a decreased likelihood for all activities.



Additional research is required to determine if more than one exposure to a farm will increase a student's likelihood of pursuing a career in agriculture, or if this result is due to the lack of knowledge around what a job in agriculture looks like prior to participation in the activity.



# AGFORCE SIPP AT A GLANCE

## SIPP EVENTS

- 1 CAREER CONVERSATIONS**  
Secondary students interact with agriculture industry professionals in an informal setting, with a list of targeted questions to learn about pathways into a career in agriculture.
- 2 FARMER IN THE CLASSROOM**  
Agricultural specialist comes into the classroom and gives a presentation to students on their area of agriculture, other agricultural industries and paddock to plate processes.
- 3 TEACHER PROFESSIONAL DEVELOPMENT**  
A range of professional development events including the biennial Food, Fibre and Agricultural Educators Conference, Teach the Teacher and Virtual PD Series.
- 4 MOO BAA MUNCH and AG CONNECT**  
Brings together wealth of industries with hands on presentations for primary and secondary students.
- 5 CAREER SNAPSHOTS**  
Your Agri-future: Agriculture industry professionals present a brief day in their life, including career pathways and opportunities in their field to secondary school students.
- 6 AG INSPIRATIONS**  
Secondary students apply to undertake a three-day intensive tour of agriculture industries in their region. Career pathways, industry roles and possible work experience are investigated.
- 7 INDUSTRY TOURS**  
These day-long events take students around a range of local agricultural industries for a snapshot of the roles within the company and career pathways.

**26,000+**  
Primary and secondary students through the SIPP programs

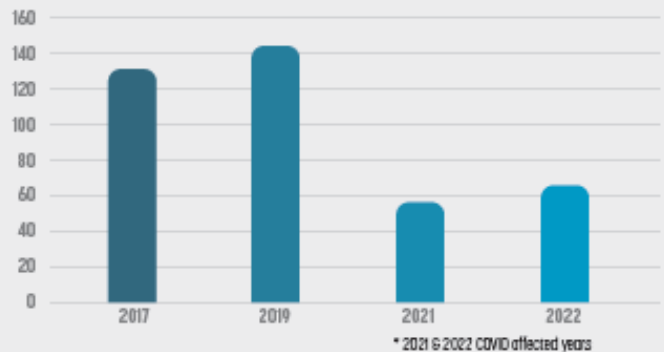
**2,500+**  
Teachers and education professionals through development programs

**550+**  
Industry partners involved with SIPP programs

\* over the last 6 years

## FOOD, FIBRE AND AGRICULTURAL EDUCATORS CONFERENCE

TEACHERS AND INDUSTRY ATTENDEES



## 4.5 OUT OF 5 STAR RATING FOR INDUSTRY TOURS



ATTENDEES TRAVEL FROM ALL OVER THE COUNTRY; QLD, NSW, ACT, VIC, TAS AND AS FAR AS WA!

# AGFORCE SIPP AT A GLANCE



## SIPP EVENTS

### ENCOURAGES YOUNG PEOPLE TO CONSIDER A CAREER IN AGRICULTURE

What I have now realised about agriculture careers is that there are more than one job to supply food and clothing etc and you don't have to grow up on a farm to work in the Ag industry.



### PROVIDE PROFESSIONAL DEVELOPMENT OPPORTUNITIES AND SUPPORT TO TEACHERS



There are many jobs that all work together in the agricultural industry other than just farming, such as; mechanics, engineers, chemist and many more.

### RAISES AWARENESS TO THE IMPORTANCE OF AGRICULTURE

Want to know more? Contact the team  
| [FutureAg@agforceqld.org.au](mailto:FutureAg@agforceqld.org.au) | [bit.ly/agforcesipp](http://bit.ly/agforcesipp)  
[agforceqld.org.au](http://agforceqld.org.au) |



#### TEACHER

The 2022 AgForce SIPP tours were fantastic and the SIPP staff did a fantastic job. Loganlea SHS is delighted to be a host site for the program and to support AgForce SIPP in any way we can. We are so grateful for the AgForce SIPP program and the opportunities it brings our students. It is a brilliant experience that bridges the gap between school based learning and industry employment and training in a way that schools either could not or would struggle a lot to provide. Our students value the program and the inspiration they derive from it lasts a long time afterwards. Students talk about their learnings and memories for a long time. Thank you big time AgForce SIPP.

#### YEAR 10 STUDENT

I come off a small cattle property myself and it was very interesting and informative to see how many different careers are apart of the agricultural industry, and how many pathways as student i can choose straight out of school. As we toured through Nurseries and Feedlots, I started to notice it's not how the industry use to be with any old bloke with a tractor and implements, the agriculture industry is now looking at more of a sustainable and robotic future. Thank you, AgForce and Downlands College for making this opportunity possible.

#### TEACHER

Due to time constraints, I don't think we at the school level would be able to make contact and link with the number of different industries that we get to experience in Ag Inspirations. 1 or 2 we might be able to organise, but not 3 per day for 3 days. It is very valuable. I know one student has already organised work experience after attending the excursion, based on what they were exposed to on the industry tour.

#### YEAR 10 STUDENT

I thought the Ag Inspirations was amazing because I learnt so many different things about so many different career pathways. I think this Ag tour has broadened and deepened my knowledge and understanding about the Ag industry.



ForestLearning is Australia’s one-stop-shop education programme, providing teachers from Foundation to Year 12 with quality teaching resources aligned to the Australian Curriculum and with a focus on Australian forests and sustainable timber products. Focusing on productive partnerships, relevant and robust resources and strategic promotions, ForestLearning seeks to develop innovative and tech savvy learning tools, such as virtual reality experiences, to cater for the needs of 21st century learners.

ForestLearning centres around three pillars for success:

- Productive partnerships
- Relevant and robust resources
- Strategic promotions.

### Productive partnerships

**SNAPSHOT:** Education and Industry collaborators around Australia, ForestLearning Industry Education Champions, member of PIEFA since its inception 2009, Peak teacher Associations, international forest education alliances.

This pillar aims to strengthen and expand ForestLearning partners within industry, education and other sectors. Key to our partnerships is our membership with Primary Industries Education Foundation since its inception in 2009. We see this joint collaborative industry wide education foundation as critical to achieving trust, brand recognition in schools and the sharing of ideas and resources to save duplications of wheels.

An example of another successful partnership is the ForestLearning Industry Education Champion program. ForestLearning Industry Education Champions are volunteer forestry and wood processing professionals working in each state and territory of Australia. They offer schools and students a unique glimpse into the work and benefits of forests and wood products through in-school visits (incursions) and school visits out to forests or wood processing facilities (excursions), presentations, and hands-on workshops at times suitable for both Champions and schools.



The ForestLearning Forest Industry Education Toolkit for industry Champions and teachers is freely available to access via the ForestLearning website and consists of ‘How-to’ guides for teachers and

Champions to organise activities, activity evaluation tools, a photo library, and primary and secondary school PowerPoint presentation templates.

ForestLearning also facilitates and enables industry participation in local and regional events with the equipping of tools and resources such as the ForestVR headset loan kits, collateral and educational tools such as the Tree Carbon Storage Tape Measure and teacher packs/conference bags/specific items upon request.

ForestLearning equipping local initiatives through collateral + tools (e.g. teacher packs/conference bags/specific items)



Partnership with George the Farmer to produce 2 educators toolkits, 3 accompanying “In the Classroom” videos, ABC iView forestry video, George the Farmer “The Great Forest Hunt” book, ForestryVR video, Forest Science Explorers Virtual Classrooms.

## Snapshot: George the Farmer

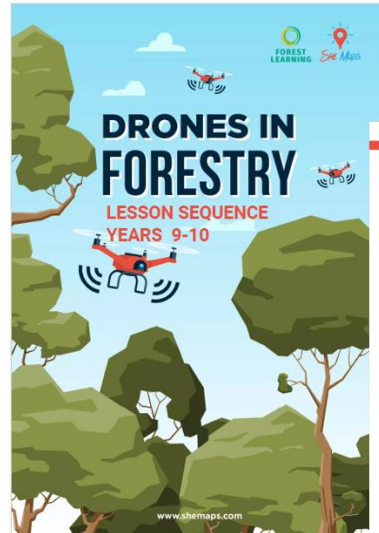
Partnership with SheMaps – DRONES IN FORESTRY (Years 5-6/ Years 9-10)

>> WINNER 2022 Australian Geography Teachers Association Awards: Best Digital/Online Resource



## Snapshot: She Maps

- [Years 5/6 and 9/10 Drones in Forestry](#) lessons + associated tools culminating in drone coding and flying
- [Story Maps](#) – interactive web based forestry journey from early years to present day



### Relevant and robust resources

**SNAPSHOT:** 74+ free F-12 teaching resources aligned to the Australian Curriculum, 9000 downloads since June 2020, 1915 registered users.



## 2022 AGTA AWARDS



## NATIONALLY RECOGNISED RESOURCES



All resources on the ForestLearning website have been:

- **Developed** by classroom experienced educators / professional teacher association groups.
- Aligned with the **Australian Curriculum**.
- **Supported** by all members of the Australian Forest Education Alliance.

- Increasingly created using **external teacher associations** or others well known in education to co-produce resources for cobranding/promotions opportunities and build trust.

ForestLearning educational resources are designed to provide Foundation to Year 12 educators and students with information, lesson plans, worksheets, multimedia video resources, and classroom or outdoor learning tools to encourage teaching about sustainable forestry and the use of wood and wood products. These resources are delivered through the

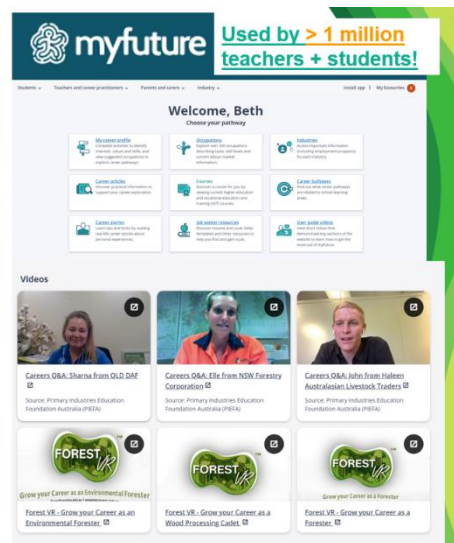
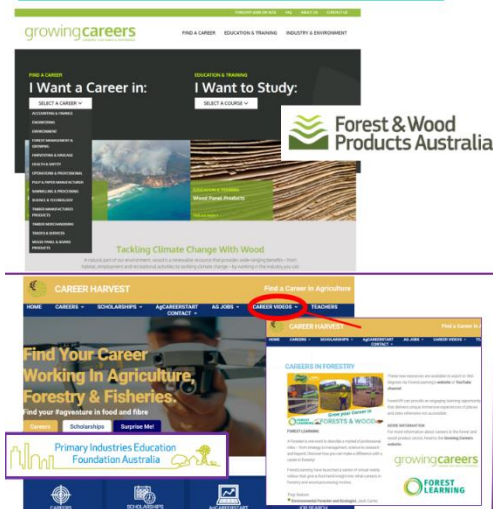
[www.forestlearning.edu.au](http://www.forestlearning.edu.au) website via a registration portal and are only available to registered users. Registration assists ForestLearning in tracking downloads and activity on the website and performing regular resource performance reviews.

### Robust Resources

- Desire is for adoption not unending development
- Audit and refinement phase
- Partnering with trusted sources
- Design and branding – building trust and reliability



### ForestLearning content on Career Websites:



### ForestVR™ – bringing the forest to the classroom or remote learner

>> **WINNER: 2022 Australian Geography Teachers Association Award – Best Reference Resource**

Australian school students are going deep into remote forest areas across the country thanks to a series of virtual reality (VR) learning tools, some funded by the Australian Government's National Forest Industries Plan and developed by the FWPA ForestLearning programme, in partnership with Australia's peak teacher association groups and members of the forest and wood products industry.





The ForestVR™ virtual tours are immersive experiences teaching primary and secondary students about the science behind sustainable forest management, the benefit of growing more trees on farms and the exciting career opportunities in forestry. The 360 degree VR tools allow students to see the entire ‘seed to shelter’ process, following seedlings on their journey to becoming the wood products they use every day. Students can also see a 30-year time-lapse video of a forest growing from seedlings to 35 m tall trees.

The free Virtual Experiences can be accessed via the ForestVR app using digital and cardboard VR headsets, iPads, smartphones, laptops or smart boards for whole-of- class activities.

### **Online learning**

ForestLearning continues to look at innovative ways of educating students online with the rise of laptop use in high schools and technology accessibility at the primary level. Beyond the well-received VR tours, many students are accessing other online ForestLearning experiences. ForestLearning has participated in PIEFA’s Forester Time webinars for National Ag Day 2020, 2021 and 2022. A further 3500+ primary students participated in the 2021 and 2022 National Schools Tree Day ‘Forest Science Explorers’ Virtual Classroom, with ‘George the Farmer’ and an expert forester, live from the pine forests of Mount Gambier.

### **Strategic promotions**

**SNAPSHOT:** 8737 teachers currently on the e-newsletter distribution list, 2,538 Facebook Followers, 590 LinkedIn Followers. Free teacher packs

This pillar aims to employ a range of strategies to boost demand, teacher adoption and awareness of ForestLearning teaching resources and tools. A range of promotional tools are developed including social media presence, e-newsletters (internal and external E-News channels) and promotional materials has been produced to support teachers and communicate ForestLearning’s message, including teacher packs. The teacher pack order form can be found on the home page of [www.forestlearning.edu.au](http://www.forestlearning.edu.au).

# NOTES