

Progress to Date Report for NZKGI

January - June 2025

Date submitted: June 30th, 2025.

The milestones are outlined below with the appropriate documents attached to meet each of them.

<u>Develop resources for junior teaching and learning programmes that maximise student</u> learning and achievement.

• Junior Agricultural and Horticultural Science Units

The Agribusiness in Schools and Sow the Seed teams have written 10 Junior Science units of work. These units are designed for either Junior Science, Social Studies, or Agricultural and Horticultural Science at Level 3/4 of the New Zealand curriculum. They introduce students to the world of primary production in New Zealand. Students delve into primary production processes, explore the life processes of plants, and examine various management techniques used in primary production settings. The work aims to foster an understanding of the scientific principles behind Agricultural and Horticultural Science and Agribusiness within the scope of primary production and develop practical skills for students to succeed in this field. These have been placed on both the HATA and the Agribusiness in Schools websites. Junior units written are:

- o Primary Production in New Zealand
- Primary Industry Careers
- Seeds
- Biodiversity
- Technology
- o Rural Safety
- Dairy
- o Beef
- Potatoes
- Sheep

Mātiki Minecraft

Agribusiness in Schools, Sow the Seed and HATA (Horticultural and Agricultural Teachers Association) along with Anthony Breese from Museograph has developed a Minecraft Education world based on the primary sector called Mātiki Minecraft and set at Totara Estate in Oamaru. Totara Estate is the farm which the first shipment of frozen lamb originated from in 1882. The aim was to create a Minecraft world for primary and secondary students in New Zealand, where years 7-10 students can discover, learn about Agribusiness, and Agricultural and Horticultural Science. Mātiki Minecraft is targeted for both non-Agricultural and Horticultural Science classes such as Science or Social Science, and for Junior Agricultural and Horticultural Science classes. It showcases 7 key primary industries — Beef, Sheep, Kiwifruit, Arable, Dairy, Pipfruit, and Forestry. The programme can be broken down into 6 areas - Innovation, Science, History, Knowledge, Creativity, and Challenges. The game can be used with the new Junior units that have been designed or can be used stand alone. There are a series of challenges or scenarios where students can innovate and create their own farming solutions to showcase inside their Minecraft world e.g. creating virtual fencing, drone use etc.

Included with the project is a website for teachers to access to the world, and multilevel cross-curricular unit plans to support teachers with their classroom programmes. Content has been linked to key industries such as beef, dairy, forestry, pipfruit, the junior units of work and their industry stakeholder information (such as Beef+LambNZ, DairyNZ, NZKGI etc) to complete set tasks. Mātiki Minecraft is also



























linked to careers that occur in each of those industries, with an aim to promote conversation with New Zealand's young people about possible future careers in the primary sector. Teachers will be able to use this with their classes for any or all these sections.

Here is a showcase video of the world Sow the Seed: Mātiki Minecraft

Here is the Sow the Seed Minecraft website https://www.sowtheseed.org.nz/. This site gives information of how to download Minecraft Education, including Mātiki Minecraft and a direct link to the Junior Teaching Units. The Junior Units have been placed on both the HATA and the Agribusiness in Schools websites.

The official launch was the 26th of March 2025. It was showcased at the HATA Conference: Methyen 2025, Hawkes Bay and will be at the Waikato Career Expos, the National Fieldays, Cultivate Your Career, Tauranga Careers Expo, and the Coromandel Career Expos.

Professional development workshops for teachers were held at the HATA Conference 2025, a series of online workshops in May and June, and at Term 2 Agricultural and Horticultural Science Regional Hubs run by Sow the Seed/ HATA.

Literacy and Numeracy worksheets

We have also developed about 45 Agricultural and Horticultural Science related literacy and 9 numeracy worksheets for Year 10 and 11, such as loading a stocking rate, fencing a deer farm, spreading Urea etc. These have been placed on the HATA website.

• House of Science

The Sow the Seed team have sponsored the Plants, Pest and Produce kit for the first half of 2025. This kit explores some of the science that supports our primary sector producers. Students identify and discuss the differences between pests and beneficial insects. The parts of a plant are discussed as well as the effects of pests on plant function. Students have fun doing "squirt science" as they explore droplet size and its effect on spray coverage and density and discuss its agricultural applications. Insect communication is explored using an innovative scent game and these concepts are investigated further with the set of pheromone traps.

Minimum of 1 workshop per Hub and face-to-face meetings.

- 8 Hubs.
 - 5 in-person in Northland, Tauranga, Christchurch, Canterbury, and Timaru.
 - o 3 on-line Hubs.

<u>Provide evidence of communication, visits and support with teachers and schools.</u>

From February to May, 46 schools were directly supported. A further 1,000 students, teachers and lay-people attended forums, careers days and conferences which exposed them to the Agribusiness curriculum, career options and what agri-teachers do.

Schools worked with.

| School | Requests | Curriculum | Resources | Moderation | Visit/F2F |
|----------------------------|----------|------------|-----------|------------|-----------|
| Avonside Girls High School | 1 | Υ | Υ | | Υ |
| Bethlehem College | 1 | Υ | Υ | | |





























Agribusiness in Schools DELIVERING AGRIBUSINESS TO NZ SECONDARY SCHOOLS

| Blue Mountain College | 1 | Υ | Υ | | |
|--------------------------------|---|---|---|---|---|
| Bream Bay College | 1 | Υ | Y | | Υ |
| Cheviot School | 2 | Υ | Y | | |
| Christchurch Boys High School | 2 | Υ | Y | | |
| Christchurch Girls High School | 1 | Υ | Y | | |
| Columba College | 6 | Υ | Υ | Υ | |
| Coromandel Area School | 1 | Υ | Υ | | |
| Dargaville High School | 1 | Υ | | | |
| De Le Salle College | 1 | Υ | Y | | |
| Feilding High School | 3 | Υ | Y | | |
| Flaxmere High School | 2 | Υ | Y | | |
| Geraldine High School | 1 | Υ | Y | | Υ |
| Hamilton Boys High School | 1 | Υ | Y | | Υ |
| Hauraki Plains High School | 1 | Υ | Y | | |
| Hutt Valley High School | 1 | Υ | Y | | |
| Iona College | 3 | Υ | Y | | |
| Kaitaia College | 3 | Υ | Y | Υ | |
| Katikati College | 2 | Υ | Y | | Υ |
| Lincoln High School | 2 | Υ | Y | | Υ |
| Lindisfarne College | 2 | Υ | Y | Υ | |
| Mt Albert Grammar School | 3 | Υ | Y | | |
| Marist College | 1 | Υ | | | |
| Matamata College | 4 | Υ | Y | Υ | |
| Mount Hutt High School | 1 | Υ | Υ | | |
| Mountain View High School | 2 | Υ | Υ | | Υ |
| Mt Hobson School | 1 | Υ | Υ | | |
| Napier Boys High School | 1 | Υ | | | |
| Nga Tawa | 5 | Υ | Υ | Υ | |
| Ormiston Senior School | 2 | Υ | Υ | | |
| Rangitaiki College | 1 | Υ | Υ | | Υ |
| Rathkeale College | 5 | Υ | Υ | Υ | |
| Rotorua Girls High School | 1 | Υ | Y | | |
| St Bede's College | 3 | Υ | | Y | |
| St Cuthbert's College | 1 | Υ | Y | | |
| St John's College | 3 | Υ | | | |
| St Kevin's College | 3 | Υ | Υ | | |
| St Peter's School Cambridge | 2 | Υ | | | |
| St Peter's College, Gore | 2 | Υ | Υ | | |
| Taumarunui High School | 1 | Υ | Υ | | |
| Taupo Nui A Tea High School | 1 | Υ | | | |
| Tauranga Boys College | 1 | Υ | Υ | | Υ |
| Te Kura | 1 | Υ | | | |
| Whangarei Girls High School | 1 | Υ | Υ | | |

























Meetings / Hui attended or organised.

| Date | Name of Event | Type of Event | Participants | Region |
|-----------|------------------------|------------------|--------------|--------------------|
| 3-Feb | Trainee teachers | ph call | 1 | Auckland |
| 4-Feb | Trainee teachers | ph call | 1 | Manawatu |
| 10-Feb | Careers advice | email | 1 | |
| 10-Feb | Introducing AB | Facebook request | 1 | Auckland |
| 14-Feb | Industry meeting | in person | 4 | Tauranga |
| 17-Feb | Teacher Training | webinar | 2 | Masterton |
| 18-Feb | Trainee Teachers | ph call | 3 | |
| 19-Feb | Teacher Training | on-line | 12 | Nationwide |
| 5-Mar | Compounding interest | webinar | 28 | Nationwide |
| 10-Mar | Teacher Training | webinar | 1 | Masterton |
| 26-Mar | Hub | on-line | 3 | Oamaru |
| 26-Mar | Industry Networking | in person | 35 | Waikato |
| 28-Apr | Hub | on-line | 2 | Waikato |
| 31-Mar | Hub | on-line | 4 | Otago |
| 7-Apr | Teacher Training | webinar | 1 | Masterton |
| 7-Apr | Clarifications | ph call | 1 | Auckland |
| 10-Apr | Industry meeting | on-line | 5 | |
| 14-17 Apr | HATA Conference | in person | 50 | Nationwide |
| 2-May | Introducing AB | on-line | 3 | Wellington |
| 5-6 May | NEX Summitt | in person | 80+ | Nationwide |
| 9-May | Rural Nat's Forum | in person | 80+ | Nationwide |
| 14-May | Lincoln Careers Day | in person | 200+ | Lincoln University |
| 14-May | Hub | in person | 3 | Canterbury |
| 15-May | Hub | in person | 2 | Timaru |
| 15-May | Hub | in person | 3 | Christchurch |
| 22-May | Moderation meeting | on-line | 2 | |
| 23-May | Hub | in person | 6 | Tauranga |
| 27-May | Hawkes Bay Careers Day | in person | 500+ | Hawkes Bay |
| 20-May | Introducing AB | in person | 2 | Hamilton |

<u>Develop of resources to provide curriculum support completed.</u>

Leaving School Career Profiles for Primary Industries

Agribusiness in Schools and Sow the Seed worked with Leaving School magazine to use all their career profiles for a Careers unit. The Leaving School magazine is distributed free to senior students in every high school in the country and is available to read online www.oliverlee.co.nz/leavingschool-issue32. Businesses write career profiles on their young people in different roles in their business, and these are showcased in the magazine.



























There are over 100 primary sector careers profiles collated from the Leaving School New Zealand magazine. Each one is on a different career in the primary industry and interviews a young person about that particular career.

There is a resource with some activities to indicate how the profiles can be used, as well as a spreadsheet where the teacher can search for a particular characteristic, such as career, school or location. Website is located: https://www.agribusiness.school.nz/course/section.php?id=363

Agribusiness assessment resources.

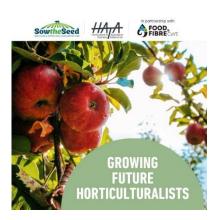
The Agribusiness assessment resources were updated and added to the Members Only section of the Agribusiness in Schools website. These are ready-to-go materials that can be used for assessment.

• Compounding interest webinar.

Agribusiness in Schools, in collaboration with Paul Bird, who is the lead advisor for business and farm systems at DairyNZ, held an online webinar on compounding interest, to support teachers teaching Cashflow Forecasting and Strategic Capital Expenditure. This webinar took place on the 5th of March at 4pm, and was one hour long, with 30 minutes allocated for content and 30 minutes for questions. The session aimed to enhance teachers' understanding and application of compounding interest into their teaching with practical examples to use in the classroom. This was a practical session, so a second screen was required to work on an online calculator. The content is accessible on the Agribusiness in Schools website.

<u>Provide evidence of opportunities for the collaboration and exchange of information with secondary schools, tertiary partners, and primary industry, such as articles in newsletters etc.</u>

• Mr Apple Growing Future Horticulturalist Internship 2024-25 Two students were selected for the summer and April school holidays and spent 5 weeks with Mr Apple to get a taste of the horticulture industry, including paid work experience and an opportunity to work alongside and learn from a team of experts. During this paid internship, the students worked within different departments at Mr Apple. The program was split into two sessions so that they experienced the full life cycle of the apple, from thinning through to harvest and post-harvest. During the first 3-week session, they were based on an orchard and for the final 2 weeks, within the post-harvest department. The internship combines hands-on work (80%), meeting and learning from experts in all departments (10%) and a joint project (10%). The students spent time within the following 3 departments:



- Orchards to understand the many jobs on an orchard which are important to growing perfect apples and spent time thinning and counting.
- Post harvest learning how the apples were tested, transported, packed, and stored ready for export while working in the packing lanes.
- Business support services met the departments who support their people and ensure the smooth running of the business from finance, marketing, and sales to shipping and compliance.



























• Rural National Party Conference in Rotorua on Agri-education.

Melanie presented at the Rural National Party Conference in Rotorua on Agribusiness in Schools. This was well received and highlighted the programme and what we are trying to achieve.

- Business Partners flyer
 The Business Partners flyer was updated.
- Fonterra and Agribusiness in Schools Agri-teacher Scholarship.

We are very excited to announce that Fonterra and Agribusiness in Schools has a \$10,000 scholarship available for someone to start teacher training in the July intake to become an Agri-teacher. The aim is to get more people into teaching Agri-education. The successful candidate will be announced at the start of July 2025.

• Evaluating the Impact of the Agribusiness in Schools Programme.

Food and Fibre Centre of Vocational Excellence recently completed an evaluation of the Agribusiness in Schools (AIS) programme, which has been running for over 10 years. This programme has had a significant impact on students' pathways towards tertiary training or employment in the food and fibre sector. The evaluation provides valuable insights, including the finding that AIS students were 3.6 times more likely to enrol in relevant tertiary training compared to non-AIS students. The evaluation also provides insights into the likelihood of students entering primary sector employment. AIS students were found to be three times more likely to be employed in the primary sector than their non-AIS peers. Students with a parent employed in the primary sector were three times more likely to pursue a career in the industry, reinforcing the role of family background in shaping career paths.

The positive feedback from participating schools reflects the value this programme brings. The interactive dashboard offers a deeper look into demographics and variables influencing both participation and progression. As Curriculum Director of the programme, Kerry Allen emphasises, "There were some really good insights with some powerful and affirming data, validating what the programme has been trying to achieve over the last 10 years. The results highlight what the programme offers and the benefits it can deliver to both students and the primary sector".

You can view the final report and interactive dashboard at: https://foodandfibrecove.nz/.../agribusiness-in-schools/

Thanks to Scarlatti for undertaking the research.

• Agribusiness in Schools at Careers Expo
The Agribusiness in Schools programme was showcased at the Hawkes
Bay and Waikato Careers Expos, as well as Cultivate your Career. We
will be further showcasing is at the Tauranga and Coromandel Careers
Expo. Students learn about the primary industries and their job
opportunities.





























Agribusiness in Schools at Fieldays.

The Agribusiness in Schools programme also attended the Fieldays in the Careers and Education Hub. There were 96 schools that came through, which was a great chance for us to promote the primary industries and all the job opportunities that are out there.



• Fieldays Cocktail Function 2025

We had a fantastic evening at the Agribusiness in Schools Cocktail Function during Fieldays, celebrating

the journey and future of the programme alongside key partners, Ministers of Parliament, educators and industry leaders. Campbell Parker opened the evening with a warm welcome. The programme highlighted the power of collaboration between schools, industry, and government in shaping the future of food and fibre education in New Zealand. Special thanks were shared with all our Business Partners, as well as the wider agribusiness community who continue to champion the initiative. Martin O'Grady reflected on how far the programme



has come, while Kerry Allen reminded us that there is still work to do to reach even more students across the country. Thanks to everyone who joined us – your support helps keep the momentum going!

Tertiary opportunities.

We have highlighted the upcoming information evenings for students looking to study at;

- Lincoln University in 2026 at Napier, Nelson, Hamilton, Christchurch, Invercargill, and Dunedin.
- Cadet training farms such as Smedley and Otiwhiti School of Agriculture.
- SIT Telford courses.

• Student opportunities.

We have highlighted the upcoming student opportunities.

- o Farm2Future Camp opportunity by Rabobank and Lincoln University.
- Workshops at Owl Farm.
- SIT Telford camps.
- Clash of the Colleges.
- Hort Day Out Over 70 high school students from six schools went to Mr Apple for the first-ever Hort Day Out! Across Mr Apple, T&G, and Horticentre Group sites in Whakatu, Year 12 & 13 students explored entomology, robotics, crop economics, post-harvest lab processes, packhouse technology, and marketing and genetics. This was a very successful day.
- Teacher Professional Development opportunities.
 - Muka Tangata Online Workshop: An opportunity to share how te Ao Māori can be embedded in teaching and learning materials.
 - o Science Learning Hub Puna Aronui Exploring mātauranga pūtaiao
 - NAAE Conference
 - Compounding Interest Webinar
 - E Tipu Conference
 - Beef + Lamb New Zealand Education Hub
 - Mātiki Minecraft Workshops





























Media

Our social media platforms, such as Facebook, LinkedIn, TikTok, and Instagram, have all had a lot of activity on them, where we have been posting both Agribusiness, and Agricultural and Horticultural Science teaching roles, career and training opportunities, regional hub workshops, articles, and anything that we think will be of interest to our Agribusiness teachers.

- o https://www.instagram.com/agribusinessinschools/
- o https://www.linkedin.com/company/82560912/admin/
- o https://www.facebook.com/groups/agribusinessforteachers?locale=en GB
- https://www.tiktok.com/@agribusinessinschoolsnz?_t=8YBQHcRunz8&_r=1
- Articles or podcasts by partners or other media companies (all highlighted and linked to on our social sites).
 - Farmers Weekly Articles:
 - https://www.farmersweekly.co.nz/news/minecraft-version-of-historic-new-zealand-farm-being-used-as-educational-tool
 - https://www.farmersweekly.co.nz/news/agribusiness-class-embarks-on-fibre-field-trip/
 - The Muster on Hokonui iHeart radio.
 - Chatted to Andy Muir about the Agribusiness in Schools programme on 29/05/2025.
 - Chatted to Andy Muir about the Agribusiness in Schools programme at the Fieldays on 13/06/2025.
 - o The Country Sport Breakfast - iHeart radio.
 - Chatted to Brain Kelly about the Agribusiness in Schools programme on 13/06/2025.
 - RadioNZ
 - On 24th of March 2025, there was a brief update on the positive Agribusiness in Schools Evaluation Report completed by the Food and Fibre CoVE.
 - On the 10th of June 2025, there was a bit of promotion for the Fonterra Agribusiness in Schools agri-teacher scholarship
 - New Zealand Herald

https://www.nzherald.co.nz/the-country/news/minecraft-version-of-historic-new-zealand-farm-being-used-as-educational-tool

Fieldays Young Innovator of the Year Award
 The St Paul's Collegiate School team KiwiPrune took out the
 Fieldays 'Young Innovator Award'. Developed as part of the
 Agribusiness programme at St Paul's, KiwiPrune is a clever
 device designed to streamline the labour-intensive process of
 removing plastic clips from kiwifruit vines – boosting

productivity, reducing strain, and supporting sustainability on orchards. Congratulations to Madeleine Anderson, Courtney Malloy, Libby Meredith and Casey Purves on their win! Learn more about KiwiPrune here: www.kiwiprune.com

























