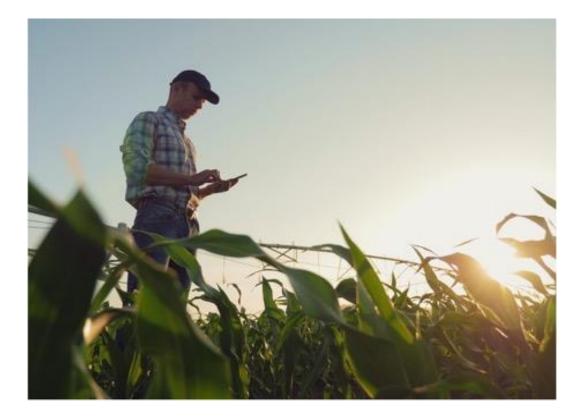
Residential and Group Training

Situational Analysis

Prepared for Food and Fibre Centre of Vocational Excellence









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BACKGROUND

The Food and Fibre CoVE seeks to develop its evidence base in respect of residential and group training, in terms of historical activity, current innovations, and delivery models.

This is purpose-based research: the FFCoVE seeks to explore the potential of a new service offering or model which incorporates aspects of residential and group training. This could form the basis of a pilot, or a model that the vocational education sector can adopt in the context of the current vocational reforms.

This report provides results and analysis of both international and national literature reviews, and stakeholder engagement to gather a range of perspectives on effective training models, past and present – a situational assessment.

It is designed to provide the 'state of play' in terms of sector support, desired outcomes, and effective characteristics of residential and group training. We set out a number of international and Aotearoa-based examples of both residential and group training models, followed by a thematic analysis of their benefits and effective characteristics.

A second and subsequent report will apply these insights and modelling to underpin a business case for a potential pilot, including a possible operating model and resourcing options.

Definitions

Residential Training

The Food and Fibre Sector in New Zealand has a significant and long-term history of residential training, most immediately associated with Telford in Southland and Taratahi in the Wairarapa. Structured cadetship and apprenticeship schemes have also featured in the past and present of the food and fibre sector. Given the practical nature of many roles in the sector, 'learning by doing' through on-the-job training has long been seen as an effective way to ensure relevant skills development.

Our exploration immediately identified a wide range of practices and learning arrangements referred to as "residential training" – everything from boarding school to classical "apprenticeship" can be seen as residential training, in the case where a learner lives and learns in the same geographic location. Particularly in the professional layer of the workforce, the 'residential course' has also come to mean a reflective and immersive programme or 'retreat', commonly offered as professional development. In these cases, a learner undertakes time away from their regular workplace for an immersive and reflective learning experience over a number of days, alongside people who come from different organisations and or industries.



For the purposes of this study however, particular forms of residential training have been explored, nationally and internationally, that share the following characteristics:

- Trainees are physically together to work and study.
- A cohort of learners undertake a shared learning experience.
- The programme involves time away from home.
- The programme involves significant work-based learning but is usually a blended model of work-based and provider-based learning.
- The programme involves a structured learning programme of longer than one week duration.

Group Training

Group Training - also referred to as group employment - varies less in terms of its core definition, but considerably in terms of its target industries and practices.

In a Group Training model, learners are employed by a co-ordinating entity or cooperative Group Training Organisation (GTO) that manages all aspects of employment. The GTO also arranges and co-ordinates a structured learning programme and arranges placement with host employers.

The overall programme of learning and division of responsibility is shared between the group employer and the host employers. Some schemes rotate learners around employers, which exposes learners to a wide range of industry practice and workplace culture, right through to individual employer "fit'.

Ultimately, a successful scheme creates a pool of talent available to participating employers, who do not themselves bear the costs and risks of direct recruitment.

Typically, group employees are only paid while on placement with hosts. If not placed, they are on unpaid leave.

The critical components of a group employment model are the co-ordinating entity, which needs to accept the significant risks associated with employment and recruitment. An effective GTO also needs robust systems for co-ordination between employers in the scheme and strong systems for learner support and pastoral care.

"GTOs remove risk and rigamarole in taking on employees"

The second and equally necessary ingredient for a successful Group Training Scheme is a 'critical mass' of willing host employers who participate and contribute as part of a collective training effort.

Within that very broad definition, there are established and understood good practices, but differences in focus. For example, GTOs can take an industry specific role (as is the case with notable NZ-based examples such as ETCO, Masterlink, and ATNZ), or a regional focus, or operate generally or agnostically with respect to industry. The most notable and comparable examples of this are in Australia, described in further detail later in this review.

A hybrid?



Again, this review was purposefully seeking to understand the potential of a hybrid of group employment and residential training. We can immediately conclude that this is at least a possibility, since these models are not at all mutually exclusive: residential training has to do with a learner's living circumstances but relates more to a learner's ability and willingness to undertake a certain form of training, including meeting its financial and/or opportunity costs.

Group training, on the other hand refers more to a particular employment arrangement and relationship linked with a training programme, and the nature of that learner's employer as a Group Training entity.

In short, could a residential training arrangement be part of a group employment model? Clearly yes, and current New Zealand-based examples and pilots, such as Tupu, or in some respects the RSE schemes, have elements of group employment and residential training.

International Review

This section provides an overview of the international evidence for residential or group training and its effectiveness as a model for training young people / people entering the food and fibre sector.

The literature review sought to find and review examples of residential or group training in different countries.

Overall, the review found there were very few international examples or formal evaluations of what we in New Zealand would define residential or group training models. In an important sense this is encouraging, insofar as it suggests that the model being explored here is genuinely novel, particularly the 'hybrid' concept.

The few examples we did find are provided below. While none align fully with the existing or proposed concept, they nevertheless provide useful insights into the challenges the model would need to overcome, as well as effective, and ineffective, practices.

United States and Canada

There were few examples of residential or group education training as defined above in the USA or Canada. Many of the examples found resembled the classic apprenticeship approach. Students, mostly in the last years of secondary school or tertiary level students, were offered the opportunity to work and study in the food and fibre sectors as apprentices.

By in large, this meant studying within an education organisation for a set number of hours per week, as well as participating in on-the-job learning, leading to a formal apprenticeship qualification.

There are however a few examples where apprentices/trainees are participating in programmes that meet our definition of residential training. Education is largely done as informal on-the-job learning supported by additional learning materials developed specifically for each individual programme. It is worth noting that in these examples there is no connection to the official federal or state education system, therefore participants do not receive a formal qualification at the completion of the programme.

New Agrarian apprenticeships

The New Agrarian Program (NAP) is an apprenticeship programme developed by the Quivera coalition, a non-for-profit organisation. The organisation aims to foster ecological, economic, and social health through education, innovation, and collaboration in the Western



United States. They partner with ranchers and farmers in Montana, New Mexico, Wyoming, Colorado and California to offer eight-month apprenticeships in regenerative agriculture.

Apprentices live on site and help with the activities necessary for the daily operation of the ranch or farm. They receive a stipend, housing, food, and pastoral care as well as regular education and training.

Apprentices are paired with a mentor or mentors and are expected to have approximately 400 – 600 hours of direct mentorship. They also receive supplementary education, visits to other ranches and farms, and attend an annual Quivera run Conference.

The NAP also offers free mentor training covering topics related to mentoring in agriculture, examples include - development of mentoring skills, effective interviews, setting expectations, evaluating written applications.

The NAP has also developed a guidebook with case study examples on how to run their apprenticeship programmes. The report includes a survey of 36 apprenticeship programmes across the US. These varied in approach from individual ranches and farms to NGOs and academic institutions. Quivera used this research to develop its current apprenticeship programme.

https://quiviracoalition.org/apprenticeships/

The Collaboration Regional Alliance for Farmer Training (CRAFT).

CRAFT is a farmer-led coalition organised by sustainable agriculture farmers operating in the USA and Canada. This self-selected coalition of participating farmers offer up their time, talent, and experience to help mentor, teach and prepare the next generation of farmers. Trainees come from a variety of backgrounds and experiences in farming.

CRAFT provides farmer-to-farmer learning and access to local farming networks. CRAFT farmer alliances are diverse and may focus on internships, employment, mentoring, field days, technical assistance, workshops, conferences, social gatherings, strategic business planning courses, farm incubators, and more. There are approximately twenty-three CRAFT participants found throughout the United States and Canada.

There is no formal study or assessment component associated with CRAFT programmes. They do provide information and resources to support participating farmers and trainees with their learning.

https://craftfarmapprentice.com/

Brookfield Farm Apprenticeship Program

Brookfield Farm defines itself as a living learning centre located in Amherst, Massachusetts. Brookfield Farm is a member of the CRAFT coalition.

The Farm is a not-for-profit, community supported agricultural project that practices sustainable agriculture. Each season they take on three apprentices and provide them with a comprehensive farming experience. Apprentices work in all aspects of the farm's production, including soil preparation, harvesting, tractor use as well as administration and marketing farm products.

During a full season, apprentices are given the information and time to learn essential farm related skills needed to manage a mixed organic/biodynamic farm on their own. In return apprentices are expected to give their labour for the daily working of the farm. Apprentices live onsite and are provided with housing and meals and are paid a monthly stipend for the



first year. First year apprentices have the option of returning for further seasons by mutual agreement.

This programme contains many of the components we consider to be residential training, however it doesn't include a formal study and assessment component. While Apprentices are provided with written learning materials and access to information, they primarily learn on the job and are evaluated on how well they perform the tasks they are assigned. There is no formal qualification or recognition at completion of the programme.

https://www.brookfieldfarm.org/apprenticeship

United Kingdom

As in the USA and Canada, there are very few residential or group training models that met our definition evident in the UK.

The apprenticeship model is popular in the UK across the food and fibre sector, these however tend to be non-residential placements. For example, students are employed as apprentices or as trainees in placements on farms, orchards, estate gardens etc. and are required to do academic study elsewhere with a provider. UK apprenticeships are strongly aligned with their tertiary education system with apprentices graduating with an apprenticeship qualification.

There are also examples of companies offering apprenticeships. Individuals are employed within the company and are deemed apprentices, participating in the companies' own programme.

Bridgewater and Taunton Collage

Bridgewater and Taunton Collage is a good example of a typical model for the UK.

Located in Somerset, they specialise in combining real-world work experiences with academic study. They offer a range of apprenticeships across different subject areas including agriculture.

Students will need to already be in employment before undertaking the programme. Once employed they can apply to become an apprentice.

Apprentices are expected to work alongside their supervisor, supporting daily operations on farm. They are not required to live onsite. They are assessed with an e-portfolio and must attend classes, at least one, every two weeks.

At the end of their apprenticeship, they receive either a Level 2 or level 3 General Farm Worker Apprenticeship (Agriculture). There are also pathway options available for those students who complete their apprenticeships.

Level 2 General Farm Worker Apprenticeship (Agriculture) - Bridgwater & Taunton College (btc.ac.uk)

Myerscough College

Myerscough College has a long history of providing higher education focused on land-based education, engineering, science, and sports.

It offers a wide range of education options for students, including apprenticeship and traineeship programmes, and is recognised as one of the largest providers of land-based apprenticeship training in the UK. They offer apprenticeships in Agriculture, Horticulture, Arboriculture, Farriery and many more.



Myerscough College runs a similar model to other providers in terms of its apprenticeships being delivered in the workplace using one on one mentorship, hands-on-training and formal classroom sessions at the College. However, they also use blended training and learning techniques with apprentices able to engage with their virtual learning platform and create an e-portfolio. As with other providers, apprentices must be employed, and it is expected that apprentices will spend 20% of their employment time engaged in training towards their apprenticeship. Myerscough College graduates are awarded with formally recognised apprenticeship qualifications.

Myerscough College | Inspiring Excellence

John Deere

John Deere dealership in the UK also offers apprenticeship to its employees and is one example of a group training model.

Like other apprenticeships, John Deere apprentices work at a dealership to gain practical experiences on the job. They are supported by a designated Learning Advisor and their employing dealer and are provided with an individually tailored learning plan leading to a nationally recognised qualification. They are also able to attend John Deere's Apprentice Training Centre to learn alongside other apprentices. Each group trains at the centre for eight weeks a year in four blocks of two weeks.

http://apprenticeshipfinder.co.uk/john-deere/

Australia

While strictly speaking part of our international exploration, Australia's context is explored here due to geographic closeness, industry resemblance, and for interesting contrasts in terms of vocational education systems and policies. This is particularly the case for Group Training, which is a more widespread part of the work-based learning system in each of its States and Territories than here in New Zealand.

According to NCVER, around 12 percent of all Apprentices in Australia are employed by GTOs, and these apprentices boast marginally better qualification completions than directly employed apprentices. Hunter Valley Training Company cites a 69% completion rate for Group Training versus 4% for directly employed apprentices.

After accounting for the different demographic profiles of GTO apprentices and trainees and employer size, the study shows that GTO completion rates for all apprentices and trainees are substantially higher than for small and medium direct employers.

Completion rates for group training organisations and direct employers: how do they compare? O'Dwyer and Korbel, 2019.

In terms of the food and fibre sector, stakeholders advise that there are no specific GTOs set up to service them, however the food and fibre sector is serviced through several generalist



GTOs (where food and fibre – generally agriculture training - is one of several industries catered for under the model), or regionally-based GTOs.

This being the case, recently the Victorian State Government has established three regionally based pilots in the first half of 2022, for GTO schemes specifically for food and fibre, focussing on three different regions with different sector needs.

Similar to the thinking in New Zealand, the GTO model is potentially attractive at a time of restricted migration and very low unemployment. The ability of a group scheme to upskill people in a co-ordinated way, while simultaneously developing a pool of talent that can be applied as needs arise.

Hunter Valley Training Company

HVTC is a generalist GTO, that also operates a Registered Training Organisation (RTO) operating across multiple industries and currently supporting 770 apprentices across a wide regional area. HVTC's CEO, Sharon Smith is also Deputy Chair of Australia's National Apprenticeship Employer Association.

25% of HVTC's apprentices are undertaking courses through its own RTO, while the remainder are either all on-job or enrolled via another provider.

Their acquisition of an RTO has expanded its offerings in a variety of areas including Horticulture.

HVTC's perception of the great advantage of the GTO model is that when employment conditions are good, an apprentice can stay with the company for the full apprenticeship term. When the economy is harder, the apprentice might be let go by one employer, but be sent to a different employer and keep continuity of apprenticeship.

HVTC experience is that the vast majority of trainees stay with one employer for the duration, however this differs by industry.

The food and fibre industries need to consider the seasonal aspects of the sector and potentially consider what a year-round model could cover, accounting for that seasonality, and potentially covering a wider breadth of industries.

HVTC considers that GTOs in the Australian context take on considerable risk. They take on the legal obligations, employer risks and commercial risks. They are an unsecured creditor. They also face a high worker's compensation levy, similar to that of labour hire type companies. This would have to be considered in any set up as there would be ACC levy and WorkSafe considerations and legalities to consider.

Companies also need good cashflow due to invoicing differences. GTOs often pay weekly but invoice monthly with settlement terms being 30 days after that.

Sharon also described the model involving pastoral care and trainee support which would be a specialty with GTOs as opposed to individual employers who can at times be left to fend for themselves with an individual employee model.

It is a tight labour market, such that the barriers to entry for some industries are currently quite low. This suggests that while the GTO model can provide a useful 'holding pattern', the pre-employment component of any programme (if any) should not be overdone.

"The labour market is so tight right now even a three-legged dog will get a run"



The same competition for trainees in NZ also exists in Australia at the moment. The willingness of workers is one issue, the competition for them and attraction of them is another, ad creates cutthroat competition among VET providers.

Australia also shares the challenge of VET perceptions, particularly in terms of the school leaver market, where students and parents are discouraged from considering VET options, in favour of academic pathways, which can manifest as reluctance to participate in taster courses or work experience programmes.

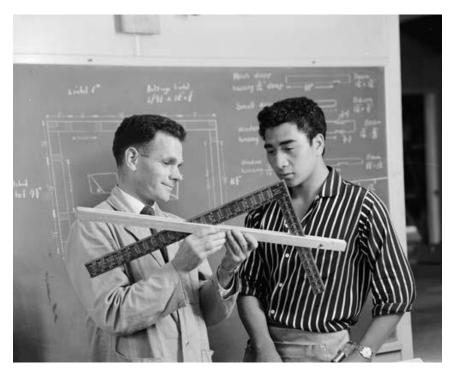
HVTC was positive about the concept of combining group training and residential training in a hybrid. It emphasised the need for peer support, mentoring, pastoral care and GTOs acting as an advocate for employees. These are some of the commonalities that a residential and GTO hybrid model would need.

https://www.hvtc.com.au



Aotearoa New Zealand

Māori Trades Training



Patrick Powhere from Murupara and building instructor Mr J. MacMillan, at Sylvia Park in 1961. (source: Te Ara Encyclopaedia of New Zealand)

For several decades, starting shortly after the Second World War, the Māori Trades Training Scheme was a mainstay of the system. In those days, industry training and apprenticeships were organised by regional committees, and while they led to trade certifications, these predated the introduction of the qualifications system, and were seen to be the domain of the Department of Labour, rather than Education.

Māori Trades Training was originally developed by Wesleyan Ministers based on Te Rahui Wahine Hostels at Turangawaewae. It retains a strong cultural resonance to this day: many whānau and hāpū speak fondly of the scheme, of how it created skilled workers who were successful and prosperous and went on to be community, business, and iwi leaders.

The acclaim is not universal though – the schemes were based in urban centres, e.g., Auckland and Christchurch, which meant dislocation and disconnection from whānau, hāpū, and rohe. We heard that some trade trainees gained a taste for the city life and did not return to their communities. This meant their skills were not delivered for the benefit of their communities, and this diaspora was seen as part of creating an urbanisation which was a negative disruption for iwi-based culture. There is a related concern that in removing people from their home regions, the scheme represented a colonial effort by Pākehā-owned business to access Māori labour.

However, the model continues to resonate in terms of its creation of economically prosperous, proud, and highly skilled tradespeople, that were able to support their whanau and use their skills to benefit their communities. In the 1950s and 1960s, National figures like



Lena Manuel worked tirelessly to connect Māori to skilled jobs and training opportunities, both regionally and later nationally. To this day, the Māori Trades Training has 'brand traction' and political cachet.

In 2010 The National-Māori Party coalition government combined and expanded two successful Māori and Pasifika schemes (He Toki ki te Rika and Pasifika Trades Training) as the relaunched Māori and Pasifika Trades Training Scheme (MPTT). This certainly tapped into an ongoing desire to see more Māori entering and succeeding in skilled trades. However, it was a very different scheme from the original trades training scheme, consisting largely of a top-up funding mechanism for polytechnic courses, and as a tools grant, which was initially difficult to access.

However, the scheme has continued, and elements of MPTT, including work brokerage and a focus on wraparound support for the education to work transition have been seen as positive, and some of this thinking has continued through to the current reforms of vocational education and concepts underpinning 'Pathway to Work" programmes. While the Ministry of Education has published some monitoring reports, we are not aware of a full or formal evaluation of MPTT, and in the meanwhile, the significant structural and resourcing changes to the sector occurring under RoVE alter the context considerably.

In a parallel development, the current government has also introduced a "Māori Trades and Training Fund" as part of regional development and COVID response, which focuses on employment related opportunities, including apprenticeship training. In its regional focus and co-ordination through the economic development rather than education portfolio, it too is redolent of the original scheme, and applicants must be Māori-led organisations.

Ultimately, we heard that the original scheme, including its residential component, was a good thing and did good things, however, in the 21st century, a "by iwi for iwi" approach is sought, which likens skills development to long-term iwi aspirations, and to support the growing Māori economy and asset base. The vision is to bring together people from the marae to gain skills, but then return them to the marae, now equipped with the skills that the marae needs.

Given the history of these schemes, there is a noticeable impetus to *return* training to the marae - that there was previously a model that worked and has been lost, and we also heard that it worked – teaching in and through the marae-based context.

"We need to deliver trades training from the marae"

In terms of desired outcomes, we heard from stakeholders that the underpinning programme content should be underpinned by a "common core" of tīkanga and Mātauranga Māori, then these co-located learners can be hosted by participating employers in different industries and sectors, according to the needs and priorities of iwi.

"When they leave the rohe to get their skills, we need them to come back to their rohe"



https://workandincome.govt.nz/providers/programmes-and-projects/maori-trades-andtraining-fund.html

https://www.tec.govt.nz/funding/funding-and-performance/funding/fund-finder/maori-and-pasifika-trades-training/

The Recognised Seasonal Employer (RSE) Scheme. https://www.immigration.govt.nz/about-us/research-and-statistics/researchreports/recognised-seasonal-employer-rse-scheme

The RSE Scheme in its current form was established in 2007, with an initial 7,000 places for overseas workers to come to New Zealand for seasonal work in the horticulture and viticulture industries. All current countries in the scheme are Pacific Islands.

Since 2007, the number of available RSE places has doubled, from 8,000 to a planned 16,000 in season 2021/22 – actual arrivals grew every year until 2019/20 as a result of the border restrictions as an impact of COVID.

While not referred to as Residential Training or a Group Training Scheme from an education system perspective, the way RSE scheme operates resembles both, and provides useful insights into effective models and operations.

Stakeholders we spoke to confirm the benefits of co-location as providing a co-ordinated opportunity to take care of the employment and wider care needs of the workers, and emphasised the range of barriers and issues dealt with, quite apart from the technical training they receive in and for the industry. The pastoral care needs can be wide-ranging, from language to medical to legal, and is critical. As such accommodating the workers together supports their own community and identity as a group of workers, but also to structure and co-ordinate the necessary supports.

It was clear to us that a critical component of the RSE scheme is the collective endeavour – the co-operative needs to operate as a co-operative. While the growers are ultimately competitors in a market, they have a shared need in terms of skilled labour and as such there is a sufficient number of employers who understand the club good and industry benefit of being part of the scheme.

The COVID years have had a major impact on the scheme, contributing to major issues in terms of labour shortage. A seasonal industry is also a time critical one – things have to happen at a certain time. The industry has pivoted to seeking more local talent, and in this regard, highlight the importance of looking local – the dispersion of the industry, orchards, and vineyards mean travel can be a barrier for the local workforce, but also that there is a sense of community and camaraderie among members of an industry within a region, which encouraged co-operative and collaborative behaviour, not just competitive.

"In the end, we all know each other. You go to some industry meeting one day, and the next morning, you'll see the same person at yoga class."



Dairy NZ On-Farm Business Internship https://www.dairynz.co.nz/people/careers-and-progression/on-farm-business-internship/

Dairy NZ has piloted an internship scheme for the summer of 2021-2022, trainees are placed with host farmers for work experience and are exposed to the reality of day-to-day business. The aim is to attract people through small internships. Dairy NZ found that talented people were choosing 'near-farm' roles, rather than on-farm roles. This was due to work inexperience on-farm, family pressure to be in more prestigious roles, perception of dairy workplace, and lack of early mentorship.

A key feature is to be able to access high-quality mentorship and transparent business operations and management information. The arrangement is a live-in, rather than a co-habitation with other students, residential situation. The aim of the pilot is to meet market demand for a more highly qualified workforce, provide capability for the initiative and then for it to be run by industry.

"The overall goal is high-quality host farmers producing highly talented graduates."

The internship includes, pre-internship support and preparation, dealing with barriers and coaching conversations (during the internship and post-internship).

The internship was created through a co-design process with farmers and students. The codesign process was a key feature in developing the pilot. What Dairy NZ thought might work, was not always in reality what farmers and/or students wanted. What they found was key themes for both parties, including, farmers must be in it for the right reasons (not cheap labour), and must have the time. Organic mentorship was preferred, as opposed to using tools and templates or any formal training of trainers' support by Dairy NZ.

"Farmers have clearly stated they want to run businesses and perform 'organic mentorship' of a high quality – they don't want superfluous tools, templates they won't use."

Students wanted to be able to access online information about host farmers and receive support with negotiating contracts. An online community is currently being considered; however, it was noted that there is some 'online fatigue' and a reluctance to engage online for extra or unnecessary work.

So far, the pilot has included tertiary students studying agriculture, with further iterations to canvas a wider group that includes potential 'career changers', who might want to dip their



toe in, but not commit to a full career change without understanding what they are getting into.

Dairy NZ was clear that their role is to address market failure, not fund education and in this instance is setting up the initiative for industry to then run, rather than providing funding for it. It was noted that funding education can become about survivability, which risks the impacts and the outcomes they are trying to create.

It was also noted that there is a fragmentation of the industry, duplication of work, lack of transparency and sharing of what are many initiatives. This can be frustrating and inefficient for the sector. Communications in both industry and cross-sector need to be more effective. Often the most impactful work is happening lower down the hierarchy, at the front line.

Grassroots Dairy Graduate Management Programme https://www.dairygrads.co.nz/

This graduate programme is a Canterbury region-wide initiative which seeks to attract recent university graduates. The aim is to support and enable ambitious graduates to fast-track learning compared to the normal industry pathway and support and enable successful careers in the industry.

The programme places university graduates in employment with farmers and runs management-related modules throughout. The programme advertises, screens and recruits graduates and organises the graduate/farmer interview. Graduates are accepted from university within five years of application. They are not required to be from an agricultural university, but they must demonstrate a desire to learn and progress in the dairy industry. The farmer's responsibility is to employ the graduate under a usual employment agreement, a competitive salary, and provide the working environment and learning culture. The focus is on dairy operations, management and business ownership. The farmers are directly involved with facilitating two of the twenty-five learning modules. Farmers pay a recruitment and administration fee to the programme team.

Informal learning is balanced with formal modules covered. These range from operational fundamentals, finance, technology, environmental as well as personal development modules that are assessed via presentation and case studies. There are no formal qualifications or credentials for this programme.

This programme was created by a Lincoln farmer who was frustrated about the lack of professional graduate programmes available in the dairy industry. Currently it is based in Canterbury with further expansion set for the South Island and nationally in 2024. Unlike the Dairy NZ internship which works with students studying in agriculture, and accept those who have minimal or low experience, this is aimed at graduates, who have experience. Their current pilot is running this year, and they have not taken all applicants. Applicants who have not had the right attitude have not been accepted and one who has not had practical experience has been moved into an Ag-Assist programme (created by the same farmer) to gain the necessary skills before coming into the graduate programme.

This is currently a self-funded model with high levels of industry support in presenting modules. Industry is highly supportive as they recognise the value in the programme,



however they will need to start paying for presenters. Currently, the farmer fees cover the programme administration "99% of the responsibility is on the farmer for providing the experience, with 1% of the focus on the attraction, selection and course content administration".

They describe the content as pushing the graduates as far as they could, with knowledge development. Further development for a learning management system, graduate portal and ability to upload an e-portfolio is being examined. This will allow scalability, though it is acknowledged that this will require a full-time manager/administrator to coordinate the programme. There is an appetite to look at potential micro-credentialling or digital badging. Funding as an enabler would be beneficial to scaling appropriately, however, there is a reluctance to lose control of content and responsiveness to meet industry needs.

Ag Assist https://www.agassist.co.nz/

Ag Assist is a commercial model and created a digital advertising platform for shift work that can be tendered for. Ag Assist covers all areas of agribusiness (dairy, sheep and beef, contractors, horticulture and arable) and supplies people to those businesses. A key part of the vision is to reconnect people with the land with flexible work and business opportunities.

"Agriculture is seasonal, yet we set our labour supply flat? Why? We thought it could be on-demand"

The same farmer responsible for the creation of the Grassroots Dairy Management Graduate Programme set up Ag Assist, due to a lack of access to quality staff. With the skillshortage, that was compounded by the lack of incoming seasonal workers, they found that it was highly evident that there was a missing link in matching those without work and the volume of work available. One of the key aims is to manage labour differently by providing an on-demand workforce. Seasonality across the sector, pan-industry, is a driver, rather than a limitation, that enables people who can't commit to regular work, or the ability to have near continuous employment.

There is a strong social-good focus. It is targeted to mobilise the underemployed and underutilised, recognising that social benefits of employment in local and regional communities. They estimate that there are 280,000 people across the country that could be in-work in the sector. Whilst they currently have targeted university students, they believe there are many ages and life stages that could benefit from the ability to use the platform. Currently they have 100 university students enrolled, with over 1000 hours per week matched "without even trying". The next phase is intended to target 'mum's and dad's'.

"It is like Tinder for agribusinesses"

In the platform, there is also a rating system, which allows employers and employees to rate each other (akin to the Uber model), which helps provide an accountability and transparency eco-system. Next development work is to incorporate an option for training, in particular, pre-employment skills, health and safety and basic land-based skills.



The platform, has the ability to scale up, with the ultimate goal national delivery.

Taratahi and Telford

https://agtaster.kiwi https://www.sit.ac.nz/campus/Telford?subject=Agriculture-Environmental-Life-Sciences

These two 'classic' residential training options in the Food and Fibre sector are described together in this report, given commonalities of the underlying delivery model and their status as historic rural training institutions. Taratahi and Telford are the two best known examples of a residential training approach developed in and for the food and fibre sector, originally developed over a century ago.

Fast forwarding to 2022, the situation for Taratahi in particular is quite fluid, with active work underway in government and in the community to explore options for its future. Following well documented issues and falling enrolment, Taratahi went into liquidation in 2018. The farm has continued on a commercial basis, and at the time of writing, the training centre is partially active, offering three-week "agtaster" courses, initiated as a COVID response policy.

Some see these kinds of short and sharp courses as part of the future of the Centre, albeit preferably at the beginning of a longer industry and educational engagement, rather than as a stand-alone programme.

Longer term, active work is underway by the Ministry of Primary Industries to explore options with respect to its future operations and ownership. This is also occurring in the context of the wider vocational education reforms, which seeks to establish a national network of provider-based and work-based learning. The issues are not straightforward, given financial issues and outstanding debts alongside the provisions of the legislation under which Taratahi operates.

Notwithstanding all the issues however, it is clear that Taratahi still enjoys strong community support in the Wairarapa but not solely, and not just for nostalgic reasons. We heard that the pathway Taratahi offers and the role it plays for the sector remains respected in the industry. While different stakeholders have different prescriptions and proposed solutions, there is a clear consensus that industry and community stakeholders alike would prefer to see Taratahi restored and successful, than see it disappear. As such, there is significant work to identify where and how it could play a role as part of the vocational education network, and to which parts of the skills supply chain it can usefully and valuably contribute, and how its model might be adapted or augmented to be more fit for purpose for 21st century learners and industry.

In "classic mode", Taratahi and Telford offer live-in learning opportunities towards formal (New Zealand) qualifications. They are both full boarding setups, with wrap around pastoral care, and twenty-four-seven support. Most learner's pathway straight from school – generally speaking at 18 years of age but can be as young as 15.

A key advantage and benefit of the residential model is to be the 'first filter'. By experiencing rural life and work in a real farm setting, young people can be assessed, and assess for themselves, if they have an interest and what it takes to succeed in the industry and with rural life. Longer term, we note longitudinal benefits too of developing networks among the learners – these formative experiences create connections and bonds that can, and sometimes do, last a lifetime in the industry.



A second natural advantage is the therapeutic effect of the cohort – residential training creates a community of learning among the educators and learners. This creates a strong support network and open communication and greater opportunity to address issues, which may be wider than the skills training alone. Here too, we heard of the collective benefits in terms of a peer culture that develops, including "grounding" the learners and developing good work habits – though in this light we hear that sometimes older learners aren't necessarily that willing to give such a hand-up to younger learners.

We heard too that the industry continues to value a broad skillset – farm work requiring something of a 'jack of all trades' breadth of skills, which necessitates strong problem-solving skills, diagnosis of issues, sound judgement, selection of appropriate solutions, and skilful execution of practical skills.

Residential training centres currently draw their learners from rural and urban communities, and have a high proportion of Māori learners. Māori tikanga however is not necessarily explicit, though peer support networks are based on a Tuakana-Teina model. Stakeholders agreed that a greater focus and incorporation of Mātauranga Māori was seen as beneficial and desirable.

Form a skills perspective, there is high demand for core, transversal skills such as interpersonal relationships, timeliness, attendance, work ethic, and employability.

"It's about turning up. If someone turns up then everything else can be taught."

We also noted a desirable relationship between residential and on-farm learning. In a workplace context, learners are always responding to what is happening on the day, which can narrow the scope of skills developed, or fragment the learning. Employers too, need to be supported with their role in terms of training and assessment.

Residential training therefore provides a safe and dedicated space to practice skills and adopt the broad skillset needed for farming in a sequenced and scaffolded manner.

As a well-known and longstanding model for residential training in the Food and Fibre sector, Taratahi and Telford were referenced a number of times by stakeholders through this research. The overall impression we get is that while the 'classic' model has been challenged by both financial pressures and societal changes, it was providing a critically useful pathways for the industry, and the closure of Taratahi, in particular, has left a gap.

We heard more than once about a 'Taratahi-first" model - that provided the initial component of a cohort based "bootcamp" in core skills training – perhaps over a period of three to four months. This provides the advantages of low-stakes repeatability of skills which is not able to be provided in a commercial context, as well as the general assessment of suitability and aptitude. This initial bootcamp would then form a stable basis for workplace-based learning, primarily delivered digitally but maintaining co-ordination, learner identity, continuity of learning journey with the initial residential component. Presuming suitable facilities are available to support the residential component (e.g., marae-based), a group employment arrangement would seem to be an ideal co-ordination and support mechanism for such a model.



"We need a sequenced mode: start off Taratahi style and finish off GFF style."

At the other end of the scale, some propose a concept where Taratahi could become something of a "finishing school" for the industry, offering advancement pathways in the industry for future leaders or managers. Somewhat akin to the Institute of Directors, or the Australia-New Zealand School of Government residential courses, learners might be drawn from a range of sectors (and from both provider-based pathways and the industry itself) to take part in intensive structured learning opportunities designed "by industry for industry" to develop the 'top end' of the industry.

For example, top-performing students from around Te Pūkenga's network could be invited or awarded places, and industry practitioners engaged as a form of continuous professional development.

We believe this concept has merit, and is also not mutually exclusive from the foundational training option more traditionally associated with these institutions. It would also serve as a good potential use of dedicated residential training resources. More work would be required to identify the desirable learning content and delivery model (and personnel) for such an advancement programme, and it might also be argued too that the on-farm setting is a less critical component of "advanced" residential training.

Coleridge Downs Training Farm

https://www.coleridgedowns.co.nz

Coleridge Downs Training Farm is comprised of three working farms in the Rakaia Gorge and Waimakariri Valley in mid-Canterbury. Coleridge Downs offers a two-year cadetship, with eight students in total in a full residential programme. The programme incorporates the New Zealand Certificate in Agriculture (Level 3) and begins the New Zealand Certificate in Agriculture (Level 4), which is then completed once the graduate is in employment.

Coleridge Downs Training Farms have a smaller cohort size of available cadetships, and their open days are well-subscribed, with over 180 people (including family) attending. They have a long application process and will receive up to 40 applications for eight places. They estimate there are up to 50 placements per year that are missed through the variety of offerings for cadetships which are all full. Some applicants that miss out will go to Growing Future Farmers. The calibre of applicants is higher every year. Coleridge Downs recruit on personality mix as they are able to train for technical capability.

Coleridge Downs highly rate the live-in, cohabitation model for the overall development of life skills, social skills and creating independence. They believe the controls around routine, and forming good habits would not be possible if the trainees were part-time. They believe keeping cadets busy is essential, as it is when they are idle, issues arise.

"We are developing independence and we try not to crush the initiative out. Sometimes it is a fine line."



The team have identified a growing need for pastoral care and mental health and resilience support. This is explicitly offered, but they require much more support in doing so, as this is something they currently provide by themselves. It was noted the Primary ITO support is waning, and the focus of the four visits per year is on delivery expectations and unit standard completions, not support. Expectations are opposed to suiting seasonality and work cycles of farm and reality. Credit completions do not work like that in industry. "Our farm has to come first (it has to fund itself), Primary ITO does not understand that. It is about education first." Continuity with Primary ITO is challenging with six different training advisors over the last five years, and currently nobody at the moment, as another advisor has left.

Farm trainers would prefer face to face pastoral care training and support over digital formats to learn more about pastoral care/learning support. A network would be useful, as would having an advisory and support person to come around and physically check they are getting what they need in relation to pastoral care and learning support to ensure they are accessing everything that is available to them.

It was felt that it would be worth looking at Telford's pastoral care model, as they are working hard to get that right and whilst they have challenges, they are getting a lot right.

"Pastoral care is huge; it just cannot be over-rated how important it is".

Key technical outcomes for graduates at Coleridge Downs Training Farm include becoming very good with stock, break fencing, mustering, and operating machinery. Technology is very important: weighing, recording, NATE transfers, file transfers. Dog training is mandatory, and all graduates leave with four dogs fully trained. Health and Safety is a huge focus area. Shearing and wool handling is run through their own programme, and they bring a shearer in to deliver this. The NZQA shearing qualification is too long and costly to deliver and there is no support from industry to provide this. All cadets learn butchery. Fencing and tractor work are areas they have identified they need to do more of.

There was a lack of understanding of what the Unified Funding System would mean for them. Coleridge Downs Training Farm is foreign owned and as a self-funded, operating model, it stands alone. A positive of being a stand-alone model, is they not bound by the New Zealand qualifications and funding. However, they do offer the Level 3 qualification and they currently receive the apprenticeship boost.

Growing Future Farmers

https://www.growingfuturefarmers.co.nz

Growing Future Farmers (GFF) offers a two-year long Essential Farm Skills Programme which combines classroom study, independent learning, group learning and farm placements throughout 10 regions in New Zealand. The programme incorporates the New Zealand Certificate in Agriculture (Level 3). They currently have 90 students in training and overall, they are working with a wider group of 300 people.

The benefits of this model are the ability to develop skills and knowledge for new entrants before they are placed into industry. Growing Future Farmers have identified that the leap straight from school to working in industry is often too great, and trainees drop out primarily because of a lack of life skills, resilience and wellbeing strategies. These skills are not



necessarily being developed at home, nor school and the responsibility is being picked up at this introductory training stage.

"We are teaching pants on, before boots on"

This is something which is a challenge to provide continued support on once trainees are placed on farms, with geographical isolation, sometimes an issue. This can cause dropping out of the system. They have to be clever at how they find this type of support and resourcing, and "It needs to be available at the click of a finger". Nutrition, cultural competency, financial literacy, how to read employment contracts – these are some of the areas that need to be explicitly taught, and GFF believes should be specifically resourced.

Technical skills training is required to be practical, as it cannot be learnt theoretically in the classroom. GFF take the graduate profile and work backwards for hard skill development. GFF identified that there were some issues with the length of the qualification, but it was achievable and that the most pressing requirement was around the development of life skills, employment skills (including reading contracts), and cultural competency.

Financial literacy and training were a key requirement. This is not part of the qualification and as it takes a significant amount of time to change a qualification, a pastoral care programme needs to be co-created and piloted to address an immediate and significant need. The current pastoral care support model provided by Primary ITO, comprising four visits per year from a Training Advisor tends to focus on qualification monitoring and completion, rather than pastoral care.

GFF suggested a pastoral care programme could be a pan-sector approach and codeveloped with industry to make a fit-for-purpose product. It needs to include training for farm trainers, as farm trainer soft-skill development is critical for success also. "This is a government problem and therefore an absolute opportunity" and it needs national funding. GFF believe that industry knows what it needs, has done so, for some time and now action is required. There are high-level international models, which New Zealand could learn from in this space. "The rubber needs to hit the road". They would like to create a pilot, benchmark it, measure, monitor and moderate and believe this could be done for approximately \$30,000/year.

Tu Te Wana - Fruition Horticulture

Fruition Horticulture is a multi-faceted consultancy, research and registered training organisation supporting the horticulture industry from offices based in Tauranga, Hawkes Bay, Nelson and Blenheim.

Tu Te Wana is a 16 week programme offered in Bay of Plenty and Hawkes Bay, linked to the Level 2 New Zealand Certificate in Primary Industries, focussing on horticulture. It is arranged as a group employment scheme – learners are employed by a horticulture employer then subcontracted to participating growers for on the job training.

It's a real job, with real expectations and real consequences. Learners are paid while on the job. The process of signing up for the job itself provides an opportunity to develop life skills – meeting employers, filling out forms, understanding employment agreements and workplace expectations.



"Employment, education, fitness, culture, it's all mapped in. You get the quals, but the success is in the wraparound."

While there are developing relationships with schools for transition and Gateway programmes, the typical recruit has come from the NEET population – not in employment, education or training.

That's why the hands on nature of the learning, and the genuine connection to industry advancement is the underlying ethos of the programme, providing the reason the learners are there.

Tu Te Wana points out that by signing up for the programme, the learner has had to make several other trade-offs in their life, including other benefits, family expectations, or their place in the First IV. It respects that decision by keeping its promises.

These are "hard to reach" learners, with little track record of educational success, but often a strong track record of broken promises, being let down by the system, and carrying an associated loss of aspiration, hope for the future, and stable influences.

"They will say at the start 'you're just going to promise me shit' so we make sure what we deliver is what we deliver. You don't ever want them to turn around and say 'but you said!""

Prior educational success is usually limited; the school system has not worked for these learners. Mental health issues loom large – the biggest need is for counselling. Furthermore, learners may not enjoy backing or support from family for their educational aspirations – so the programme steps in to provide life stability that underpins success in skills training.

That means pastoral care – covering any and all aspects of the wider world for these learners – "anything that is a barrier to learning" is vital. This includes support for learning, but also everything else, from transport, drivers licences, and even ensuring that programme delivery sites are understood to be "neutral territory" with respect to gang affiliations.

Unfortunately, layered on the significant challenges of supporting these learners is the equally significant bureaucratic challenges of "Wellington Tape". In order to support the range of learner needs, the scheme and many like it must contend with a fragmented range of support services with arcane application processes, differing requirements, durations, and conflicting entitlements.

Staff turnover in officialdom that makes it difficult to maintain continuity of support, and frankly, saps the energy of the people who are trying to help – including many of the officials themselves, who can see the benefits but work within bureaucratic constraints.



"someone has to know all that stuff, understand all the rules and know how to work the system."

Given all of the presenting challenges, it's clear why the resourcing for models such as this needs to be streamlined, so that the presenting issues can be addressed. Tu Te Wana would like to see a streamlined and packaged set of resources to cover the education and the pastoral care needs in a combined and efficient way, that it is trusted to manage in the best interests of its learners, who are indeed, the hardest learners in the system to engage and to keep engaged.

Tu Te Wana also sees a critical need for that wraparound support to continue beyond the course, into the first several months of employment, to maintain that connection and support the learner with their journey to productive employment.

"You've spent all that time and money building up the skills – why not do the last step and connect them with the outcome."

The programme sees Te Ao Māori concepts – whanaungatanga, manaakitanga, and mana – as intrinsic to both what and how it delivers. Learners do not just sign up for a course, they sign up to join a community where they can expect trust and loyalty from the programme and are expected to reciprocate. Te Ao Māori concepts provide purpose and direction to the learning and create learner community and identity. It's use as an underpinning ethos for the programme helps overcome other life barriers, connecting the learners back to where they come from – and reflecting a wider theme, to encourage learners to remain and contribute in their local communities.

"We visit the four maunga as part of the course, understand the story of Te Mata, Waimarama – it opens up all these other doors and connections. We strengthen their skills and their culture"

Ultimately, Tu Te Wana is seeing successful outcomes for learners where nothing else in the system has succeeded, including the "big cogs", who talk about being learner centred but do not necessarily behave that way.





"Don't go the easy way out. Be brave. Take training back to the marae and give it back to Māori, deliver it through Te Ao Māori."

TUPU

TUPU is a Te Ao Māori solution based in Tai Tokerau (Northland) that is learner and industry led, locally designed and delivered, regionally supported, and centrally enabled.

There are iwi-led elements within the design and governance of the model, which operates a group employment arrangement, led by Te Rarawa and involving all the iwi of Te Hiku o te Ika,

TUPU is a pilot initiative resulting from a Joint Work Programme, which drives the partnership between Te Hiku Iwi, and Crown Agencies such as the Tertiary Education Commission, Ministry of Social Development, and the Ministry of Business, Innovation and Employment.

The whakapapa of the TUPU model stems from years of trials and learning to evolve an iwiled workforce development solution. Although the TUPU model is designed for anyone, Māori make up 56% of the Te Hiku population, with a higher representation in unemployment statistics. Therefore, Māori population outcomes are considered paramount in the design and is underpinned by Te Hiku social foundations and target outcomes for whānau.



Horticulture is a priority economic driver for Te Hiku and growth has resulted in significant demand for a workforce at all skill levels. There are enough people, just not with the right skills. Local firms also prefer to employ locals rather than a transient workforce as they require reliability. A workforce supply, training and management model could help provide a reliable local workforce with appropriate and transferable skills that could provide flexibility and progression to other sectors. This would enable a responsive workforce all year round and across employer needs and timeframes. Additionally, the pilot offered the opportunity to establish standards around employment contracts and processes.

The aim was to pilot a horticulture group employer for a three-year period aiming to achieve a high level of service. The network of provision includes: Manager, Group Employment, Navigator, and Peer. The group employer is a not-for profit entity that screens, recruits, employs, and places participants into a pre-employment programme funded by MSD. Pastoral care, cultural development and learning support throughout the programme is provided by the group employer and funded by MSD. The host business pays a premium hourly rate to the group employer to have a participant seconded to their business on a contract basis to work and learn. Group employment costs are covered by the premium and the shortfall by MSD. Participants learn on and off job during rain or other down times such as between seasonal employment activities, as well as eLearning. Tupu finds it also is essential to ensure the candidates are interviewed, but for those that just miss out, there is an opportunity to point them into immersion opportunities to fast-track skills, which keeps them engaged in the system.

For participating host employers, they understand the value of the scheme for their business. And it is necessary for them to understand the value proposition and return on investment. It helps employers plan for their workforce and "Employers get to try before they buy". Key factors in making it work are using work brokers to adequately match employers to employees. Host employment skill development is also key. A structured approach of work experience prior to being offered a place, can help with the transition. Support with the life skills, employability, pastoral care and bringing the whānau alongside are all key in making it work. Consideration of competition and envy from other seasonal employers is also important.

For participating employees, there a number of benefits in addition to being employed and trained for 52 weeks a year. They are better positioned for further employment and advancement, as they develop transferable skills as well as specific technical skills. Pastoral support is available for life, learning, and employment challenges. Seasonality and downtime is addressed by off-job learning and or other soft skill development. Unit standards achieved are recorded on the learner's NZQA record of achievement and employability skills achieved can be endorsed using Youthub or a similar digital platform. Permanent employment may be within the programme employer or another employer that sees value in the skills of the candidate.

The TUPU project has identified there are large challenges and risks involved. There is a significant investment of time to set up and support this model and it needs to be an iterative process. There are significant poverty, housing, transport issues with a corresponding lack of hope. This is generational and it takes time to solve. As such the larger aim is to provide a "Cradle to Career" approach. Any interventions need to be supported by those who are accepted by the community. Whānau needs to be brought along on the journey, allow space for the employee to build independence, then bring the whānau back on the journey.

Consideration of "tall poppy syndrome" within family units is needed as youth may 'show parents up', which can cause conflict. Iwi boundaries must be also be considered, as sometimes inter-region shifting causes issues as it is seen as a loss to the region.



"It needs to bring hope and confidence back to individuals, families, communities. That there is more to life: ambition."

From an educational perspective group training needs to be a broadly based educational approach, but not broad-brush stroked delivery. "A TEC/NZQA approach only, is not going to work. Government agencies need to answer to need, however it does take time to build, and the right people need to be involved." Whilst recognizing formal learning, it was also identified that most learning is informal/non-formal, including sports teams and marae skills. Clusters of unit standards may be an enabler, but not the main focus. It is important for both employers and employees to recognize technical competency as soon as it is achieved. Training must include foundational, life skills and employability. Pastoral care needs to be wraparound support by the educational structure, otherwise there will be disengagement. Culture and confidence training is necessary to maintain commitment.

Otiwhiti Station Land Based Training School

Otiwhiti Station is a large-scale sheep and beef operation in the Hunterville district, Rangitikei. They offer a full cadetship programme that incorporates the New Zealand Certificate in Agriculture, (Level 3) over 44 weeks. Otiwhiti believe the current training works and the statistics speak for themselves, in 15 years they have had 100% retention and 100% completion with 100% of students employed. 2022 is the first year, one student has decided it is not for them. They have grown from 9 students/year, to now taking 18 students/year. It was acknowledged that it is now highly competitive to get into cadetships.

One of the reasons the training farm was established was to bring back youth into farming and into the community (which was shrinking in terms of age and population). The community now has double the youth. Another catalyst for the inception of the training farm, was that graduates from other providers would arrive with huge CV's, but were not work ready. They would need retraining to get up to speed, learn how to work dogs, learn life/work skills. Otiwhiti decided they could do better.

Otiwhiti considers the fact they have the students 24-7, to be advantageous, as it is the full immersion experience with the actual realities of the work that they are training to do, including seasonality of tasks, real actions and consequences of farming, the ability to experience and work within all operations of farming both small and large.

It also means the learning encompasses much of what schools, providers and block courses struggle to in terms of life skills: time management, getting out of bed, self-management, cooking meals, manners, co-existing with others/social cooperation. Having a sense identity, belonging and building relationships are core values of a residential training model and by its' nature, it fulfils those. Not all cadets come from homes that have existing good relationships and habits in place and this means that good training habits, can be un-done as soon as students leave – this is why the full immersion, residential training model works, it is fully holistic and provides modelling and experience of complete life skills. This prepares graduates for real life.

"The 9.00-3.00pm model fails, whereby the students go back home, and it may not be a positive environment"



The authenticity of the training is a key feature. It is real work, that has real consequences and outcomes (e.g. if your fencing isn't done properly and a bull goes through, equals a real, tangible consequence, which will need to be addressed).

The opportunities to practice and learn through repetition are far greater, than that of other models. Cadets learn and then repeat skills on a working farm, rather learning skills and knowledge through books and simulated environments.

Otiwhiti focuses on five pillars: shearing, break in and work dogs, fencing, kill and process a sheep, horse-riding. Practice is key. For example, when we teach shearing, we teach it for 3 weeks. Repetitively. They learn skills best by repetition, they need the practice to become competent. It isn't something they can do a couple of times and expect to know how to do.

The school has to stand on its' feet. Productivity sits at one end (profitability) and training sits at the other. One of the largest and hardest barriers is funding and the cost of training. It's not 9.00am - 3.30pm training. Essentially, they complete 240 credits in a year, however it is not recognised. There have benn discussions over the years with NZQA and TEC regarding the specialist nature of what they do, however they have been unsuccessful at getting anything outside of the box. The funding model needs to be re-examined for specialist training.

In the Otiwhiti model, due to a shortfall in funding of \$100,000/per annum, and the need for the training model to stand on its' own feet, Charles set up a group of 'Farmer Partners', who employ the Otiwhiti students. They had a 100% buy-in from farmers – twelve partners in total. This has been hugely beneficial, aside from covering the funding shortfall. Students work on other farms, learn other practices (good and less good), adaptability, they encounter a full spectrum of farming and the opportunity to practice more. They connect with multiple employers and also contractors'/agriculture businesses, which then connects and networks them to wider opportunities. This has led to employment in other areas as well. Charles believes this has been a key to success – students are taught they are building their own brand out there in the industry and they rise to the occasion and take advantage of it.

People do help, because they see the value. Financial investment also could be provided to residential training farms to showcase what they do in schools and get people passionate about agriculture. Charles does this for schools which support Otiwhiti, but more could be done, wider, which would need funding.

Under the new Unified Funding System, Otiwhiti PTE have identified funding will drop by \$1,322.00 per student. "This is in a year when our costs have gone up by over 10%. This will be challenging. Less funding, does not mean more training, or more quality"

Deepsea Fishing School – Westland

Deepsea Fishing school is a residential training operation related to seafaring and fishing, based in Westport, and operating for 20 years.

For Deepsea, the key advantage of residential models is a controlled and authentic training environment. They need to develop skills in and through the industry so students are ready for the reality of the work environment in deep sea fishing. The training process is authentic, the industry rules apply – e.g. being drug and alcohol free, bullying free, and the ability to get along with fellow crewmembers in an environment where you cannot avoid them.



Deepsea also see the residential environment as removing outside distractions, which is valuable for students that come from challenging environments with poor role-models.

Ultimately, it sees that the realities of life on deck simply cannot be replicated – it's definitely 'sink or swim', but ultimately undertaking the training in this way makes the learning curve and culture shock of the work place less severe.

"they have to experience life at sea, the seasick ones get weeded out. You can't read about this stuff, you have to see and experience it."

Deepsea has a strict no drugs, alcohol, bullying policy. People are asked to leave for breaking these so the culture is upheld, there is a 20% attrition rate.

Depending on the backgrounds of the learners, issues do arise, and ultimately Deepsea needs to make hard calls because the safety and welfare of the team depend on a strong sense of belonging and discipline among its crew and staff. This can cause issues with wider families but ultimately there is individual responsibility. The positive flipside of this is that the total immersion also creates strong bonds of friendship, comradeship and belonging.

It can be a dangerous profession, so - timelines, structured learning, free time, authentic community involvement –are all carefully structured and monitored.

Deepsea believes that the residential model it offers is applicable to other Food and Fibre industries, though clearly the working conditions in its case necessitate the 'total immersion approach'. It noted there is potential to combine with industries with similar skill requirements to develop people and deliver qualifications that are as portable as possible, which suggests further the need for residential models to consider what might be included in a 'common core'.

Deepsea has also considered the implications of the Unified Funding System, noting the high financial and capital costs associated with their residential model. Deepsea considers residential a very high cost model, boats, accommodation, and there is a need to more easily connect to wider support.

Analysis and Themes

What characteristics of residential training models are considered to be effective or advantageous?

The full-immersion nature of the residential training model is considered to be a key foundation for the effectiveness of the various programmes delivered. It provides an authentic and real-life environment which reflects the realities of the business they are learning to be employed in. This includes the environment, seasonality, as well as being part of core operations and solving real operational problems. Actions have direct consequences in a business operation, rather than a simulated environment.

Whilst qualifications sit alongside, they are not the primary focus of the training. Core skills are trained and there is ample opportunity to practice. Training can be targeted and individualised, where necessary, and also cover wider skill training and more informal learning opportunities.



The residential nature of the training allows for a holistic training experience that enables core life-skills to be modelled and trained. There is a risk of that training being undone if trainees were to be there part-time or return home to challenging environments. Co-habitation and working with others are a key requirement of successful employment and the residential element trains teamwork, dealing with conflict and problem-solving, as well as meeting key human needs, such as a sense of belonging, comradery, and contributing to a wider, common goal.

All parties researched identified that the need for life-skills, employment skills, financial skills, and pastoral care were extremely high. The live-in model allows for timely identification of needs and the ability to provide responsive support. However, it was identified that much more advice, and pastoral care support is required and needs to be a priority at national level.

What international, historical, or current practices can we learn from?

Overall, New Zealand's residential and group training models are unique when compared with international examples of similar concepts. However, there are learnings that can be applied to both the existing models and the proposed hybrid concept.

Internationally, similarities include a traditional apprenticeship model featuring set hours of off-job training and on-learning leading to formal qualifications. Some models offered similar residential, co-living arrangements, particularly in the United States, however, this is an uncommon practice in the United Kingdom.

Differences in global offerings included examples where there was no link to federal/state funding and therefore no qualification. These programmes were supported via industry-led coalitions and/or not-for-profit organisations, as well as individual companies. Key learnings that could be applied, are the flexibility in a varied and contextualised approach as well as the high degree of mentorship hours offered in these programmes. The informal learning and assessment component is high and there is a focus on industry business to business partnerships, which includes apprentices visiting other businesses and information and resources to support the business owner.

Global practices such as using digital, virtual platforms, that enable the ability to access interactive learning content, social engagement and building an e-portfolio for assessment could be considered essential ingredients in a proposed training model in today's era.

In Australia, the group training model is a more significant feature of work-based learning, than in New Zealand and has more successful completions than a direct employer-led apprenticeship. A key feature of the group training model is the ability to upskill a pipeline of talent in a coordinated way that can be utilised on-demand. Pre-employment training and pastoral care needs also can be a more formalised approach in this model. There are shared considerations such as labour markets, unemployment rates and migration. Additionally, GTO business requirements and risk profiles are generally similar in both countries. Both countries share competitive demand for trainees and the ongoing barrier of perception of VET education being less desirable than more academic pathways. A critical mass cost-model lens is required for further exploration in the New Zealand model.

In Australia there was also an emphasis on the necessity of a strong pastoral care, peer support and a mentoring approach that has been a strong theme throughout domestic research.



Domestically, current practices in the residential training models that can be carried forward include the social cooperative learning within the co-living arrangements, and the authenticity of training as related to the key operations of the primary business (including the seasonality) and overall life-skills and pre-employment skills. Trainees have opportunities to be fully immersed and practice, which prepares them well for future employment.

Where models have utilised industry and business to business partnership practices, they have had buy-in and have increased their viability.

The Dairy NZ Internship pilot offers a unique residential placement which has the potential of not just targeting those already in-sector, but also career changers. The co-design process of this pilot is a practice that should be considered in developing the next iteration of training model.

The Grassroots Dairy Business Graduate programme also offers a residential placement that is uniquely for university graduates with experience. It is a high value proposition for all parties and at the scale it is currently it has a high proportion of self-funding and farmer responsibility. It is a relatively new programme, so full benefits are not yet able to be described, but early student, employer and industry feedback is promising. It is worth considering how this would change at scale and with further intended development.

Whilst Ag Assist is a commercial, labour supply model, it has applications in the group training model in terms of how they have approached seasonality and the vehicle (platform), they have used to achieve this. The training needs are similar to that of a group training model and it would be worth further exploration how this could be supported rather than duplicated.

Whilst the coordinated approach and membership of a Group Training Scheme is different to the residential model, there are similarities in effective training practices. This includes authenticity of training, pre-employment skills, and a high need for pastoral care and wraparound support.

Whilst learning support, pastoral care and wellness are all part of both residential and group models, the research clearly highlights the perception of an immediate and pressing need for this to be a far stronger consideration and approach in future training models, with a call for this to be a pan-sector, national and government-funded approach.

Do models underpinned by Mātauranga Māori offer opportunities that would create a successful and sustainable training model?

In essence, training models that have been underpinned by tīkanga and Mātauranga Māori have had success in the past. The original Māori Trades Training scheme was seen as an effective training model. Whilst the historical model took people from the marae to gain skills, and intended to return them to the marae, equipped with the skills that the marae needed. The main criticism being that the relocation and urbanisation of Māori could be disruptive, and not return skilled workers to the rohe, and additionally caused tribal conflict between regions in some instances.

The current regional development initiative "Māori Trades and Training Fund" is a potential opportunity to fund regionally focused and coordinated employment related opportunities, including apprenticeship training, for iwi.



Overall, there is an appetite to grow the Māori economy and skill development with an approach of "by iwi for iwi" approach to support longer term iwi aspirations. A Māori Trades Training scheme co-designed with iwi, regionally-based, and delivered where possible, on the marae, and for the marae is the envisaged model. Residential and co-habitation, naturally fit within this approach.

There are learnings from the Tupu model which can be incorporated into this model. The Tupu project is a co-designed Te Ao Māori solution that is a culmination of learnings from years of trials to build an effective workforce development model. Whilst the project still needs to mature before conclusions around success and sustainability can be drawn, the project provides key insights into the development of training models that are learner, industry and iwi-led, as well as the challenges involved.

Learnings from the Tupu pilot project that can be applied the 'cradle to career' approach that highlights the need for a broader and longer-term lens to create sustainable change in particular in areas that experience high poverty. Inclusion of foundational, life skills, pre-employment skills, cultural confidence, and involvement of whanau on the training journey are seen as essential.

The Tupu project was created for everyone, though the demographics were predominately Māori. As such the model is underpinned by key elements which could be successfully applied to all training models in light of the overall research themes that have highlighted similar requirements in terms of a training model.

What educational offerings and workforce outcomes would be most highly valued?

The authentic and valid training provided in both the residential and group training models are highly valued as graduates are deemed appropriately trained and work ready.

Graduates are trained in the core skills required for the operations of the business they are working in. For example, in a sheep and beef operation, that includes foundational skills such as shearing, breaking in/working dogs, fencing, killing/processing a sheep, horse-riding and stock work. If those foundations are achieved, the rest of the skills follow.

Life-skills, mental wellness and resilience, teamwork, financial literacy and employment skills are all identified as being a

necessary part of training to ensure graduates are ready for the workforce. These are not necessarily learnt at home or in school, so providing this is crucial and necessary and the residential training model offers that.

Pastoral care support was a significant theme from all those interviewed. Whilst pastoral care is provided by those training, an offering that is more comprehensive, assists trainers and trainees with timely and responsive support would be highly valued by all parties. It was identified that this could be a centralised, funded model that clearly and transparently outlined the support options available and offered training to both trainers and trainees.

In both of the internship and graduate programme levels, learning the core business functions and mentoring are key aspects that underpin these programmes. The features being on-farm, authentic and applied.

What levels of learner cohort, employer participation, and financial investment would make such a model viable (including consideration of key demographic shifts)?



A group training scheme is seen as an appealing option when there are very low unemployment and migration rates, however viability when these factors are reversed requires consideration. In the food and fibre sector, exploration of the possibility to balance employment, seasonality and continuous employment, by offering a model which can coordinate employment across the breadth of industries available is positive.

A key learning to reflect on from the Australian model is ensuring the New Zealand costmodel is sustainable. The Australian chapter of the Global Apprenticeship Network (GAN) estimate that a successful GTO needs 150-200 apprentices/trainees per annum with approximately 300 employers to allow for rotations, cancellations and poaching. Smaller GTO's with 80-100 apprentices/trainees are not seen as being resourced to provide a quality service. Reflection on whether the New Zealand food and fibre sector could achieve this critical mass needs to be applied to the development of the model, again including a panindustry approach.

Again, a longer-term lens is required for regions where there are not necessarily the key numbers of apprentices/trainees and/or employers, but where the model would be highly beneficial in terms of graduate, employer and industry outcomes.

An interesting note is that the Otiwhiti training operation has doubled the number of youth in their relatively isolated rural community, through their training offering. Whilst proportionally a small base, it does highlight that there are pull factors at play for the right model that can serve to attract young people to the regions and the industry.

What are the implications of the new Unified Funding System for the proposed training model?

The cost of delivery for residential training programmes is high, due to capital and operational costs as well as providing the full immersion experience.

On the other hand, we heard that the residential component itself need not be unduly long, and that it is more a matter of the whole programme being co-ordinated and supported, with the majority being delivered via work-based learning, which may create savings.

Many providers of these programmes are already being creative in terms of how they cofund their programmes, by accessing and leveraging business to business partnerships and industry support.

Whilst this has been beneficial for all parties involved, in particular the trainees, there is a level at which this support will remain capped to which it is economically viable for the businesses involved.

The request from iwi stakeholders too 'return training to the marae' (or *from* the Marae) is particularly fruitful to explore, as an opportunity to deliver training and support learners via a residential model which is infused and underpinned by tikanga and Te Ao Māori. This has its own resourcing implications, but offers a penitential wide range of benefits in terms of inclusion and belonging issues, and alongside skills training.

The implications of less funding under the Unified Funding System, will place challenges on already tight operating margins. Less funding may mean less training and/or less quality.

All providers have identified a significant and pressing need for more pastoral care support, and ultimately funding.



Conclusions

Ultimately, we find that a high quality group employment operation would be an ideal coordinating mechanism for a multi-mode programme involving work-based and digitally delivered learning, underpinned by an initial residential component.

A group employment entity could manage a residential programme delivered by itself, and involving host employers.

Design and delivery of programme needs to occur close to a learner's community, to address barriers and get right skills right place right time.

Key advantages are: total immersion, learner identity, authentic learning, breadth of experience, seamless transition, exposure to real industry and employers, and co-ordinated support throughout by both peers and the group training scheme.

Māori-led schemes need to be aligned to local iwi aspirations and seek to retain skills within a rohe. The residential component of a marae-based programme need not be industry specific, but develop foundational capabilities and core learning (including life skills, Tikanga, behavioural).

The residential component is not limited to foundational skills: there is a desire to see 'future leaders' or advancement pathways in the industry, or aspects of leadership and management relevant to the food and fibre sector.

The residential component needs to take a wide definition of pastoral care to encompass all life barriers to learning.

Group schemes (according to Australian research) show significantly better completion rates than directly employed traineeships and apprenticeships.

Group training programmes could be designed to offer a breadth of experience by following the seasonality of food and fibre industries.

Lessons for the next stage:

We still need to test employer willingness to be part of a co-operative (including a copayment to support the co-ordination function).

This will rely on a crisp articulation of the proposed model, including its operations and resourcing, which is the desired outcome from the next phase of this project.

Conceivably, Te Pūkenga's network of provision could support such a model, or a GTO developed from an industry association, or a GTO with an associated PTE, such as the example in Hunter Valley.

The implications of the new resourcing system for vocational education (UFS) have come through our engagement, even though the details are only just emerging. New incentives have been created both in terms of quantum of rates, and the impact on current state delivery as a result of the delta from the current EFTS rates to particular modes of provision. This still needs to be analysed and modelled as part of developing a pilot business case.



We will continue to need to take a human-centred and co-design approach to developing a pilot. In a number of areas and through a number of examples, we see "paying it forward" as an area for development in the culture of the industry.

We believe consideration should be given to national level marketing or campaigning to develop an industry-wide mission around industry engagement in training.