

Level 3 Graduate Outcomes vs Employer Expectations

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Introduction

‘The New Zealand and global primary sectors are facing an increasing number of unprecedented challenges, including the requirement to lift production, to ensure environmental impacts are minimal/sustainable and that animal welfare practices are of a high standard and are socially acceptable. This requires a skilled, knowledgeable and increasingly adaptable workforce’ (Taratahi, 2015).

Across New Zealand the primary industries account for nearly one in every six jobs (in some regions this figure is much higher at one in every three jobs) and is responsible for over 70 percent of our product exports (MPI, 2014). This is clearly an industry worth developing and investment.

MPI (2014) has estimated the following capabilities are required by the red meat and wool sector by 2025; 5,100 fewer workers overall but an additional 11,400 workers with qualifications and 32,700 trained workers to replace natural attrition. This substantial number implies a significant increase in the number of skilled graduates entering the industry and existing workers gaining formal qualifications are required.

With farms increasingly on the leading edge of technological development and implementation, particularly in pastoral farming (Knowles, 2010), roles that have traditionally not required formal qualifications will increasingly need greater skills and post-school qualifications (Grimmond, 2014). As stated by Murray (2006) ‘there is a growing recognition within the agriculture sector that good education and training practices are an important part of the solutions to many of the challenges facing farming’.

The greatest proportion of jobs throughout the primary sector are typically classified as ‘working on the land’ (MPI, 2014). In 2012, 44% of all farm holdings were classified as ‘mainly sheep and beef farming’ (Statistics New Zealand, 2012). This encompassed the largest segment of the sector, the next largest being dairy at 21%. New Zealand’s vocational education programmes support and develop these vital segments of the sector (Taratahi, 2015).

Industry need is clear, it is now a major challenge for New Zealand’s vocational training sector to meet this need by increasing the demand for training and ensuring that training is fit for purpose. A key part of addressing the need is to understand the need. This will involve effective communication with the farming sector, the employers, and matching qualifications/programmes with what is required from each role throughout the industry.

With this in mind and for the purpose of this paper I have focused on the National Certificate in Farming Skills (Work Ready) (Level 3) delivered by Taratahi Agricultural Training Centre (Taratahi) to assess how well graduates of this programme are meeting employer expectations for skill, knowledge and attitude. I have also chosen to focus on graduates entering the sheep and beef industry.

The National Certificate in Farming Skills (Work Ready) (Level 3) is delivered by Taratahi as a full year, full time programme. The intention of this programme is to prepare students for their first job in the industry or for further study, typically a Level 4 programme. An entry level position in the sheep and beef industry is typically junior shepherd. Therefore, creating an easy transition from this programme to junior shepherd is important.

The aim of this paper is to also gain a clearer insight into the expectations employers in the red meat sector have of an entry level employee/graduate of a Level 3 programme and how well graduates of Taratahi’s National Certificate in Farming Skills (Work Ready) (Level 3) programme are meeting those expectations.

Background

Taratahi Agricultural Training Centre, established in 1919, was initially established to train soldiers returning from the First World War for careers in farming. Since then the organisation's focus has developed to offer training for all New Zealanders in a range of disciplines and it also provides some programmes for international learners.

Taratahi has campuses throughout New Zealand; Northland, Auckland, Waikato, Bay of Plenty, Taranaki, Manawatu, Hawke's Bay, Southland and with its main residential campus in Wairarapa.

Taratahi offers a range of part-time and full time programmes that range in length and from Level 2 to diploma level (Level 5) on the tertiary education framework.

Taratahi owns, leases or manages a variety of farming properties, with over 50,000 stock units under their control and milking 2,500 cows. Training for students takes place on these farming properties.

Of note, agriculture is unique within the tertiary education arena as there are more people trained in levels 1-3 than from levels 4 -10 and the percentage of students at the higher levels has actually decreased. This trend is in the opposite direction for all other tertiary courses/disciplines (Knowles, 2010). This highlights the importance of training and education at Level 1-3.

Review of literature

It is generally accepted throughout the sector that the demand for skilled labour is on the rise. It appears that the value of training and education is a 'hot topic' throughout the sector. Many recent articles can be found in the media portraying a general anecdotal view that employers view the skills, knowledge and attitudes of many graduates entering the industry as inconsistent and lacking. Interestingly, I found this trend to be changing. Reports from Federated Farmers and ANZ show that while the general trend over the last decade has reflected increasing concern, over the last 6 months this trend, while still high, is seen to be reversing. I have explored this anomaly further in the literature review below.

The Central South Island Residential Training Farm Steering Group (CSIRTF group) has been investigating the feasibility of a Residential Training Farm in the South Island while also exploring the 'perceived shortfall in skill labour. The CSIRTF group 'believes that there is a significant shortfall in the number of capable, skilled and willing people to meet industry requirements. This view is supported anecdotally by many in the sheep and beef sector attempting to fill positions at various levels' (Barr, 2014).

Barr (2014), who completed the feasibility study on behalf of the CSIRTF group, states 'on the back of these improved returns the sheep and beef sector's demand for skilled labour is on the rise. The skills required in the sector have reached a new high in terms of complexity. Highly technical production techniques and the increased level of monitoring and accountability have intensified the requirement for staff to be technologically savvy and to demonstrate a high degree of understanding of the requirements of operating in today's agribusiness sector'.

Barr (2014) goes on to state 'there are a number of education providers in the agriculture domain but employers report inconsistency in graduate capability in a practical sense, a view consistent with the drivers for the TRoQ (Targeted Review of Qualifications) review currently being undertaken...There is a perception

that most current training options are theory heavy and do nothing to address the necessary personal skill development e.g. attitude and work ethic and are failing to meet the on farm requirements for a practically skilled labour force’.

She also states, ‘while the unit standards available for assessment in the agriculture domain do capture the variety of skill requirements for the industry the framework makes it very difficult to adequately ensure competency in a practical sense. This results in a qualification that may not address farmer’s requirements in terms of practical competency of employee’s’.

Barr states that ‘consistency of practical assessment has also been raised as an issue. Employers lack confidence in being able to hang their hats on a graduate profile as they feel there is too much variation in levels of competency’.

Interestingly, Barr (2014) explains ‘a further complication lies in the fact providers will often enhance the content of a qualification by delivering a learning programme that differs from that prescribed by the qualification requirements. This is usually done in response to industry feedback but would suggest the qualification may not be meeting industry needs in its current form. This approach, while commendable, further serves to confuse industry employers in terms of graduate capability’.

‘The current programmes are perceived as theory heavy and lack the ability to deliver an employee ready to hit the ground running. This requirement within the industry has perhaps been exacerbated by the shortage of skilled labour which has led to the need for staff to often work unsupervised before they are capable of doing so’.

‘Current training provision appears to have limited practical applicability on-farm. This appears to be the greatest criticism coming from employers who regularly comment on the shortage of skilled labour at all levels of their businesses’.

These sentiments are echoed in Piddock’s 2014 article in the NZFarmer ‘Farm training handed a fail mark from farmers’. Piddock quotes Dr Clive Dalton (a former AgResearch scientist and teacher) as labelling the industry’s current education scene as a dog’s breakfast of courses and that Federated Farmers members have said at a recent regional executive meeting in Hamilton that farming students were not being properly prepared for the realities of working day-to-day on a farm.

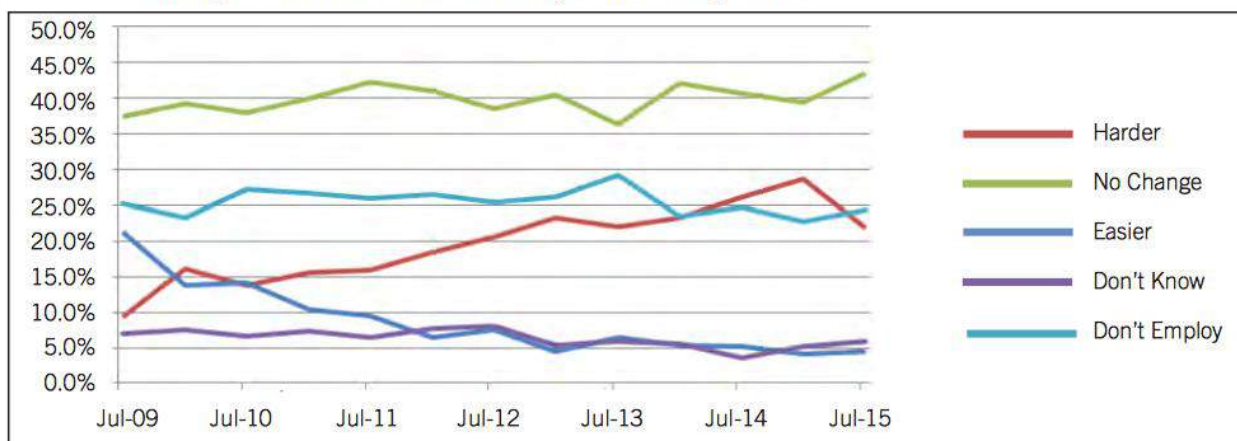
Piddock states ‘the state of training in the agricultural industry has come under fire by farmers who claim the qualifications being given to students lacked value and credibility’. He quotes Waikato farmer, Craig Littin, “Farmers want a qualification where they knew exactly what an employee was capable of”.

Since 2009 Federated Farmers has been conducting a six-monthly survey to ‘understand how farmers are feeling about the economic climate and how they are responding’. The 2015 Federated Farmers Confidence

Survey indicates that 'an important barometer for farmer sentiment and the strength of regional economies

Figure 1:

Ability to Recruit – All Farms July 2009 – July 2015



is the ability to find skilled and motivated staff'.

Figure 1 shows that over the last 6 months there has been sharp drop in the number of people who found it harder to recruit in the previous 6 months. Overall, 21.9% of respondents found it harder to find skilled and motivated staff over the past six months (down from 28.6%, January 2015). This remains a notable number. The majority of respondents cited 'no change'.

Correspondingly, the number of people who have found it easier has been dropping since 2009 and has plateaued since 2013.

As can be seen in Table 1, all four industry groups had net decreases in the difficulty of finding skilled and motivated employees since January's survey with the Meat and Fibre sector finding it the least difficult (although still difficult).

Table 1:

Ability to Recruit by Industry Group

	July 2015 Harder	July 2015 No Change	July 2015 Easier	July 2015 Don't Know	July 2015 Don't Employ	July 2015 Net	January 2015 Net	
Dairy	24.8%	47.5%	4.2%	5.9%	17.6%	+20.6	+28.2	▼ 7.6
Meat & Fibre	19.4%	40.1%	4.8%	6.6%	29.1%	+14.5	+19.7	▼ 5.2
Arable	19.3%	37.3%	2.4%	13.3%	27.7%	+16.9	+19.2	▼ 2.3
Other	30.0%	42.0%	8.0%	0.0%	20.0%	+22.0	+28.0	▼ 6.0

The following (Tables 2, 3 and 4) show what farmers rate to be their single greatest concern and also the areas

Table 2:

SINGLE BIGGEST CONCERN BY INDUSTRY GROUP - July 2015

Concern	Dairy		Meat & Fibre		Arable		Other	
1. Farmgate and commodity prices	49.0%	↑ 3.0	24.8%	↑ 2.6	39.3%	↑ 15.8	13.2%	↓ 3.2
2. Regulation and compliance costs	12.3%	↓ 7.7	22.6%	↑ 3.2	19.0%	↓ 1.5	22.6%	↓ 8.3
3. Weather	6.2%	↓ 4.2	14.7%	↓ 15.3	11.9%	↓ 15.0	26.4%	↓ 0.9
4. Industry specific issues	11.5%	↑ 7.5	12.5%	↑ 3.7	8.3%	↑ 1.9	7.5%	↓ 9.7
5. Viability & profitability	9.6%	↑ 3.9	3.9%	↑ 1.2	1.2%	↓ 1.4	3.8%	↑ 3.8
6. Input costs	5.1%	↑ 1.4	3.5%	↓ 0.3	4.8%	↓ 1.6	3.8%	↓ 0.2
7. Debt, interest rates & banks	5.5%	↑ 2.6	1.3%	↓ 2.1	0.0%	↓ 2.6	3.8%	↑ 7.1
8. Economic situation	2.1%	↓ 0.1	5.5%	↑ 1.7	8.3%	↑ 3.2	3.8%	↑ 2.0
9. Staffing	3.6%	↓ 2.3	2.2%	↓ 0.1	2.4%	↓ 2.7	1.9%	↓ 1.7
10. Feed and Grazing	0.8%	↓ 0.1	3.1%	↑ 0.6	1.2%	↓ 1.4	3.8%	↓ 2.0

Table 3:

Highest Priorities for Farmers (All Farms)

Priority	January 2015	July 2015	Change
1. Regulation and compliance costs	24.4%	25.2%	↓ 0.8
2. Fiscal policy	8.2%	7.8%	↑ 0.4
3. Monetary policy	7.7%	9.7%	↓ 2.0
4. Trade policy	6.6%	5.4%	↑ 1.2
5. Industry specific issues	5.0%	2.7%	↑ 2.3
6. Restrict overseas investment	4.9%	4.0%	↑ 0.9
7. Supporting agriculture & exporters	4.8%	3.7%	↑ 1.1
8. Economy and business environment	4.3%	6.1%	↓ 1.8
9. Employment and skills	3.9%	6.1%	↓ 2.2
10. Housing	3.3%	1.1%	↑ 2.2

Table 4:

Highest Priorities for Government by Industry Group - July 2015

Priority	Dairy		Meat & Fibre		Arable		Other	
1. Regulation and compliance costs	21.7%	↓ 4.3	23.2%	↓ 1.9	28.6%	↑ 0.4	28.3%	↑ 4.7
2. Fiscal policy	8.1%	↑ 3.0	9.6%	↓ 0.3	7.1%	↓ 0.6	5.7%	↓ 8.8
3. Monetary policy	9.1%	↓ 2.8	6.4%	↓ 4.7	9.5%	↓ 5.9	11.3%	↑ 2.2
4. Trade policy	7.2%	↑ 1.7	6.8%	↑ 0.7	4.8%	↑ 2.6	3.8%	↑ 3.8
5. Industry specific issues	5.3%	↑ 4.2	5.7%	↑ 1.4	3.6%	↓ 0.2	5.7%	↑ 0.2
6. Restrict overseas investment	6.6%	↑ 2.2	3.1%	↑ 0.4	1.2%	↓ 1.4	1.9%	↑ 1.9
7. Supporting agriculture and exporters	4.9%	↑ 0.1	4.6%	↑ 1.4	3.6%	↑ 2.3	3.8%	↓ 5.3
8. Economy and business environment	4.0%	↓ 2.6	3.9%	↓ 2.0	3.6%	↓ 4.1	5.7%	↓ 1.6
9. Employment and skills	5.3%	↓ 1.5	1.5%	↓ 4.6	2.4%	↓ 2.7	1.9%	↑ 1.9
10. Housing	3.6%	↑ 2.5	2.6%	↑ 1.7	3.6%	↑ 1.0	1.9%	↑ 1.9

that farmers think the government should be focusing on.

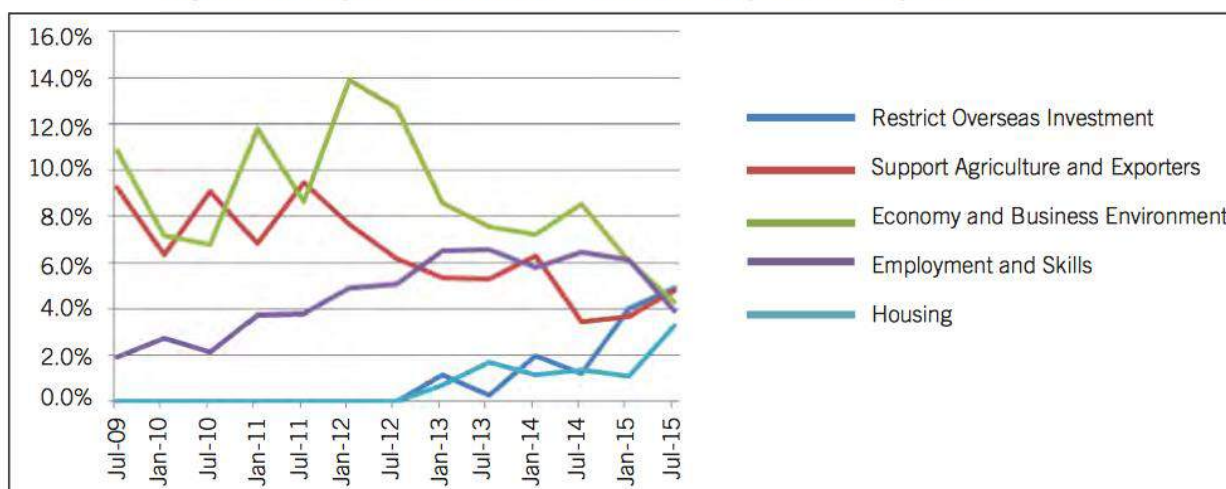
Consistent with the reduction in the proportion of farmers considering it to have been harder to find skilled and motivated staff (figure 1), tables 2, 3 and 4 indicate that concern about staffing has also dropped, although marginally for the Meat and Fibre sector.

Also consistent is the reduction in the % of respondents who thought ‘employment and skills’ was the highest priority for the Government. Though this still rates as ninth (out of ten) of the highest priorities for the Government (as rated by respondents).

While steadily increasing since 2009 the view that this should be the highest priority for the government has decreased since January 2015 (Figure 2), though not as notably as that of ‘economy and business environment’.

Figure 2:

Highest Priority for Government – All Farms July 2009 - July 2015

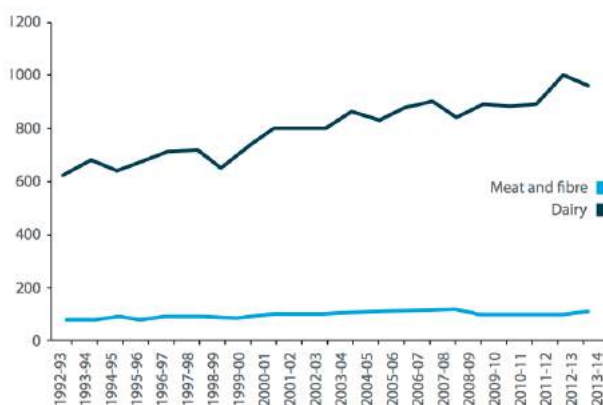


ANZ (2014) in their publication ‘Red Meat Sector Insight (2014) state that while ‘the national flock may be reducing, productivity gains can go far to make up for less capital stock numbers. The best red meat producers are generating returns that are the equal of any producer in any sector. As can be seen in figure 3, production (measured at kg per ha) has been increasing steadily since 1992.

‘When farmers talk about their own businesses rather than the industry, a surprising number are upbeat; a consequence of the results they are seeing from focusing on factors within their control –productivity and profitability on-farm’.

Figure 3:

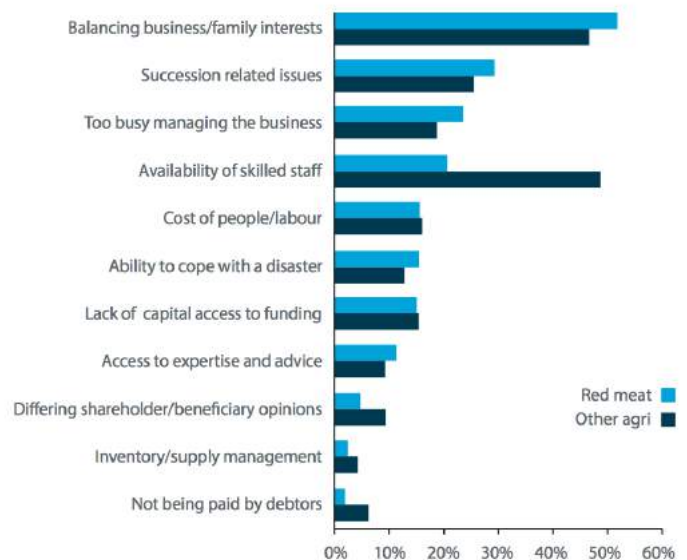
PRODUCTION (KG HA)



Source: Beef+Lamb New Zealand Economic Service; DairyNZ Economic Survey

Figure 4:

WHAT CONCERNS YOU IN YOUR AGRIBUSINESS



ANZ state that ‘there is acknowledgement that innovation is likely to come from young people. But attracting young people with the requisite skills to take on management responsibility is an issue intimately tied to succession planning and the perceived viability of the red meat sector compared to other types of farming’.

Figure 4 shows that the availability of skilled staff is the a key concern for farm business at just over 20%, though much less for the red meat sector than for other ‘agri sectors’ which indicate this at 50%.

Edmonds (2012) in her article ‘Ag-training faces a reboot’ explains the targeted review of qualification currently underway across the tertiary sector, ‘last year the Minister of Tertiary Education ordered a full review of qualifications by industry/sector to ensure the correct alignment of training and education to industry needs and expectations. As usual they have given it a mnemonic - TRoQ’. She states ‘along the way the original concept, whereby the skills and knowledge contained in a specific qualification’s components would be clear to everyone, including employers, has become blurred’. John Troutbeck, from DairyNZ, who has been leading the review of agricultural qualifications explains ‘we began with a process of consultation which included significant input from the relevant pastoral industries and from a number of training organisations. Based on this, a draft qualification map was produced. This went out to a number of organisations representing the wider pastoral sector for comment. We have now collated the feedback and are pulling together a revised qual-map in consultation with NZQA and industry...This will give employers a much clearer view of how qualifications will relate to employee capabilities, during training and on recruitment’.

Research Question

How does graduate skill, knowledge and attitude align to employer expectations of a Level 3 graduate and entry level employee?

Methodology

Survey design

I have chosen to conduct a survey to source the information required to answer the research question above. The survey consists of open-ended questions and also questions where the Likert scale has been applied. I believe that the use of these two types of questioning will enable me to obtain the information required. The open-ended questions allow the respondent to add detail and insight to their answers specifically in relation to their expectations of a Level 3 graduate/entry level employee.

The Likert scale has been used where clear analysis is required.

Sampling

The survey (appendix one) was sent to 35 farmers who offer work experience placements to Taratahi's Level 4 students. Level 4 students have recently graduated from the Level 3 programme in question and are placed on farms for work experience. It is expected that they have attained the level of skill, knowledge and attitude required to be able to secure an entry level position on farm.

The purpose was to find out if graduates of the Level 3 programme met the ability, knowledge and attitude that was expected of them by employers/work experience farmers.

Data collection

Data was collected via an online questionnaire (google forms). Google forms is also able to collate responses into an excel spreadsheet for analysis as well as providing a summary of responses in the form of graphs.

Survey sections were

- 'Your Farming Business' - to gain an understanding of farm size and the number of employees employed on farm
- 'Involvement with Taratahi' - to gain an understanding of length and depth of relationship with Taratahi.
- 'Understanding of the Programme' - to gain an understanding of how well expected outcomes (as set by the programme) are understood.
- 'Stock handling', 'Health and Safety', 'Fencing', 'Handpiece Work', 'Agrichemicals', 'Water work' and 'Butchery' - to gain an understanding of employer expectations in each of these fundamental skill and knowledge areas and whether a Level 3 graduate meets these expectations.
- 'Attitude' - to gain an understanding of how well graduates align to employer expectations in key attitudinal areas.

Limitations

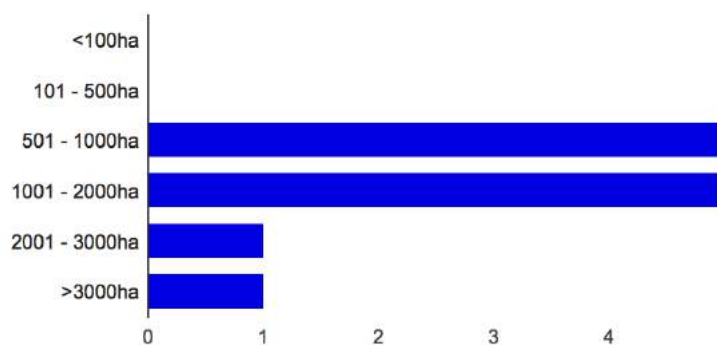
The number of farmers who responded to the survey is not sufficient to provide reliable quantitative data.

This analysis has not included how well aligned employer expectations are with set programme graduate outcomes. This would be a useful next step.

Results and Discussion

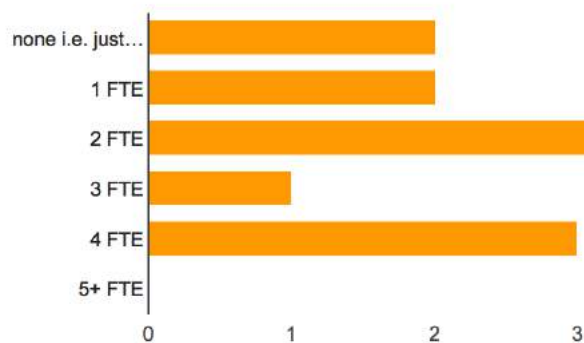
Your farming business

What is the size of your farming business?



As can be seen above, the majority of farm sizes were between 501 and 2,000 ha. 42% of respondents' farming business are between 501 and 1,000ha and 42% between 1,001 and 2,000ha.

How many employees do you currently employ when fully staffed? please note FTE = Full Time Employee.



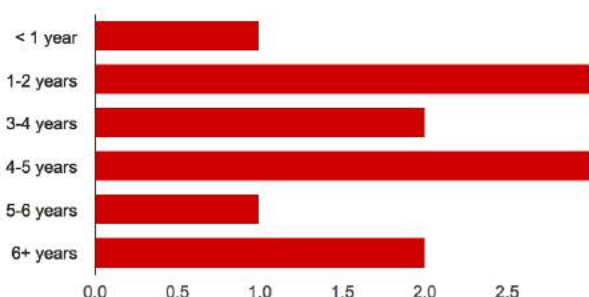
33% of respondents stated that their farm employed 3 FTE (over and above the farm owner) when fully staffed. 25% employed 4 FTE.

Interestingly, on further analysis, the number of FTE per farm did not relate reliably to farm size. Farms ranging from 501-1,000ha employed between 0-2 employees. Farms ranging from 1,001-2,000ha employed between 2-4 employees. Further research to ascertain how FTE levels are decided could be interesting, e.g. per stock unit, related to production levels, further breakdown of farm size etc.... I have, to date, not been able to source this information elsewhere.

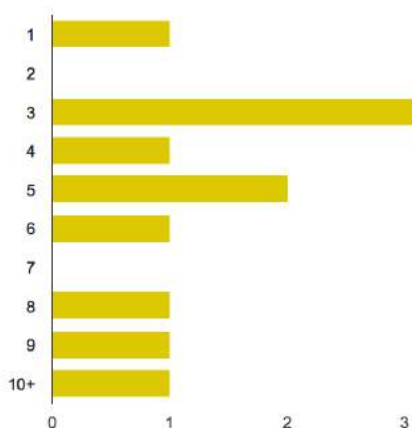
92% of respondents were involved in either local or regional discussion groups, two of who were the chairs of the discussion group. It would be fair to say that all respondents have involvement in the industry beyond the farm gate.

Your involvement with Taratahi

How long have you been a 'second year' work experience farmer for Taratahi?

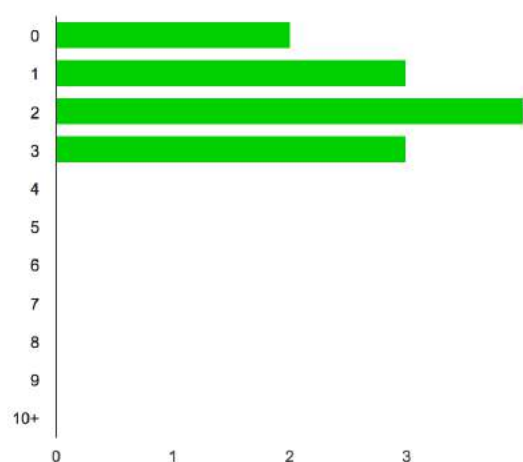


How many students have you taken on for Taratahi over this time period?



The above graphs show the 92% respondents have taken on at least three students for work experience placement with 50% of respondents providing placements for at least 4 years. This reliably indicates that the majority responses are based on experiences of multiple Level 3 graduates.

How many Taratahi graduates have you employed?



How many of these completed their second year work experience placement on your farm?

0	50%
1	16.7%
2	8.3%
3	8.3%
4	0%

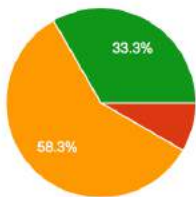
The above graphs show that 84% of respondents had employed a Taratahi graduate (over and above a work experience placement) 58% having employed more than one graduate.

There was an anomaly with those who responded to, 'of those graduates they had employed, how many had completed their second year work placement with them'. As they indicated a number higher than the number of graduates they had employed I have discounted these responses. 50% of respondents employed at least one of their work experience placements students.

Interestingly two farmers employed all students they had supported through their work experience placement (one farmer employed all three graduates and one two graduates). One other farmer stated 'he would employ at least six out of eight (work experience placement) students, if he had the employment'.

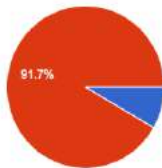
Your understanding of the programme

How familiar are you with the NZQA unit standards/required outcomes associated with this programme?



I don't know what you are talking about	0%
I am not at all familiar with them	8.3%
I am familiar with them	58.3%
I am very familiar with them	33.3%

Did you have any input into the development of the programme?



Yes	8.3%
No	91.7%

If so, in what capacity?

Standards assessment

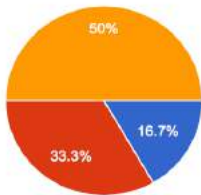
The vast majority of the respondents were either familiar of very familiar with the expected graduate outcomes expected of this programme, one respondent being involved in standards assessment.

Does a graduate meet your expectations?

The following sections summarise the responses to ‘how well does a Taratahi Level 3 graduate generally meet these expectations?’ This follows a question ‘what are your expectations of a graduate’s skills and knowledge?’ I have summarised responses to this question in the discussion.

Stock handling

How well does a Taratahi Level 3 graduate generally meet these expectations?



They have quite some way to go	16.7%
They are close to meeting expectations	33.3%
They meet expectations	50%
They exceed expectations	0%

This section showed a mix of response to this question. With 50% of respondents indicating that graduates meet expectations and 33% indicating that graduates are close to meeting expectations. Overall, a reasonable result.

Analysis of the open-ended responses indicated a mix in opinion for what graduates should be capable of. General consensus was that graduates should be competent in yard work (drafting, drenching, vaccinating, weighing, move stock, keep stock flowing), be able to stand in the right place (self and dog around stock), stock health/condition,

“As a level 3 graduate I would expect them to know three key things of farming - feed, water and fences”.

There were mixed views on whether a Level 3 graduate should have no, one or a team of dogs and whether a Level 3 graduate should be able to shift mobs independently.

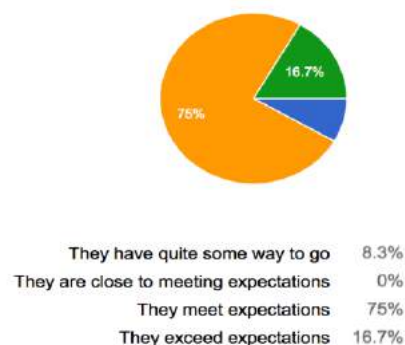
“Would not expect him/her to be able to shift mobs on their own but could bring a small mob to and from yards via lane ways” vs “shift stock independently”.

“Exposure to principals of animal health is good, not essential, learn that on the job”

Additionally, many listed skills such as ability to listen, have to be able to trust them and adjust when things don't do to plan. One stated that *“trust, respect and work ethic are more important than knowledge”.*

Health and Safety

How well does a Taratahi Level 3 graduate generally meet these expectations?



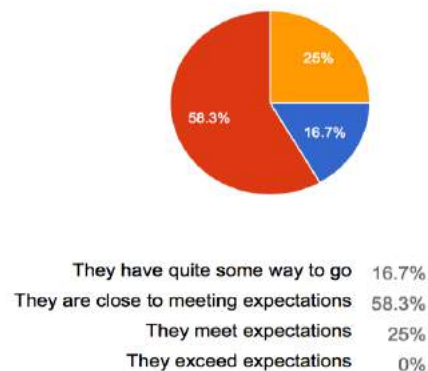
This shows 92% of respondents stating that Level 3 graduates either meet or exceed expectations relating to Health and Safety. Overall, a good result.

The most common points, coming through from open-ended comments, were employers were seeking graduates who had the ability to follow on farm practices and who had an understanding of up to date safe practices around, and while using, common farm equipment, vehicles and agrichemicals.

A number of respondents noting the *“the more formal certificates they can get around health and safety the better”.*

Fencing

How well does a Taratahi Level 3 graduate generally meet these expectations?



Only 25% felt that graduates meet their expectations regarding a graduates skill and knowledge relating to farm fencing. While 58.3% felt that graduates were close to meeting expectations.

The general expectation of respondents was that skill and knowledge was “fairly basic”. The view on what “basic” was ranged from “manual digging and wiring for repair work” to “dig a hole, strain a wire, put in a post, hammer in nails and put down a three wire electric fence”.

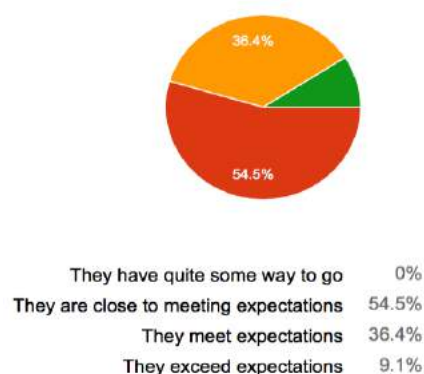
Most stated that graduates should be exposed to but do not need to be able to build a new fence on their own. They should be able to complete general repairs and maintenance.

“Basics required to be very competent. Repair fencing, tools, knots, posts etc. Stripping fences important and over looked skill. Basics of electric fence operation and maintenance. In terms of new fencing, again good to have had exposure, but don't need to be able to build a new fence on their own. Need to have a good understanding of the structure, tools and principals of a new fence e.g. gear stays, angles, run posts, foots etc”.

This appears to be an area where an increase in graduate ability would be beneficial.

Hand-piece work

How well does a Taratahi Level 3 graduate generally meet these expectations?



45.5% of respondents felt that graduates either meet or exceed expectations. 54.5% felt that graduates were close to meeting expectations and 0% felt that they were a long way off.

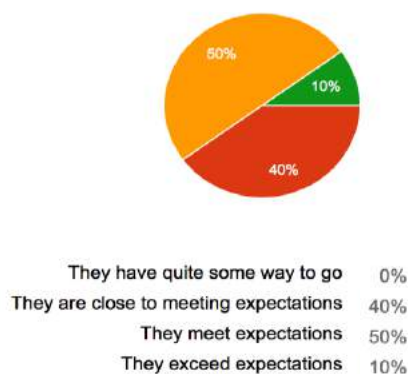
Most respondents stated that they expected graduates to be able to crutch and dag hoggets proficiently (tidily and consciously). It was not the general expectation that Level 3 graduates could shear a ewe, stating this *“was a bonus but not expected”*.

It was also important that graduates are able to clean, maintain and grind their gear.

Two respondents gave amounts that they would expect a graduate to be able to complete. One stating 300 per day (dagging) and another 40 per hour (hogget's), another expected a graduate to be able to stay on the hand piece without stopping for two hours.

Agri-chemicals

How well does a Taratahi Level 3 graduate generally meet these expectations?



0% of respondents felt that graduates had 'quite some way to go' before meeting expectations. 60% of respondents felt that graduates either meet or exceeded expectations. 40% felt that graduates were close to meeting expectations.

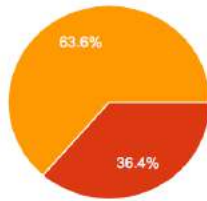
Respondents expectations of graduates was again 'fairly basic/low', *“a detailed knowledge is not really required in an entry level position”*.

“Graduates should be exposed to the general principles of dealing with chemicals and spraying”. The importance of understanding safety and using personal protective equipment and knowing which chemicals are used for what was also emphasised.

Water-work

63.6% of respondents stated that graduates meet their expectations for water-work on farm.

How well does a Taratahi Level 3 graduate generally meet these expectations?



They have quite some way to go	0%
They are close to meeting expectations	36.4%
They meet expectations	63.6%
They exceed expectations	0%

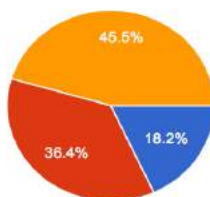
Again the majority of respondents stated that expectations were “*very basic*”. This included fixing a trough, joiner and pipe and recognising tools.

A number of respondents mentioned the expectation that graduates should be able to identify a problem and take the initiative to fix it (or know if they should feed back to the boss).

Also mentioned was the importance of gaining the trust of the farmer.

Butchery

How well does a Taratahi Level 3 graduate generally meet these expectations?



They have quite some way to go	18.2%
They are close to meeting expectations	36.4%
They meet expectations	45.5%
They exceed expectations	0%

81.9% of respondents stated that graduates either met or were close to meeting expectations.

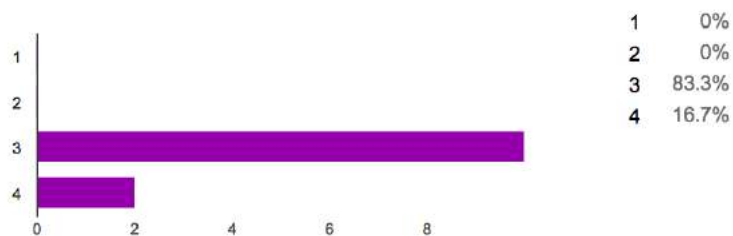
One respondent made clear that this was a core basic skill of an entry level position. *“Graduates need to be able to do this competently and be beginning to build up speed, both in the paddock and in the killing facility (muttons)”*.

Most stated that graduates need to be able to competently and safely kill a dog tucker. There were mixed views on whether a graduate should be able to prepare a house mutton.

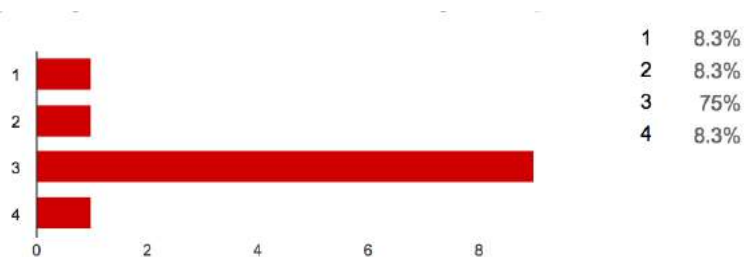
Attitude

Scale = 1 = very unsatisfied 2 = unsatisfied 3 = satisfied and 4 = very satisfied

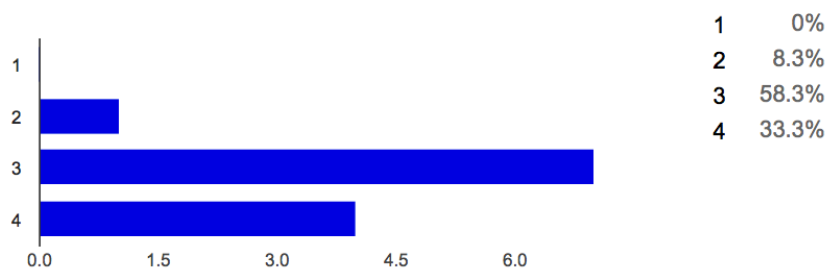
Reliability



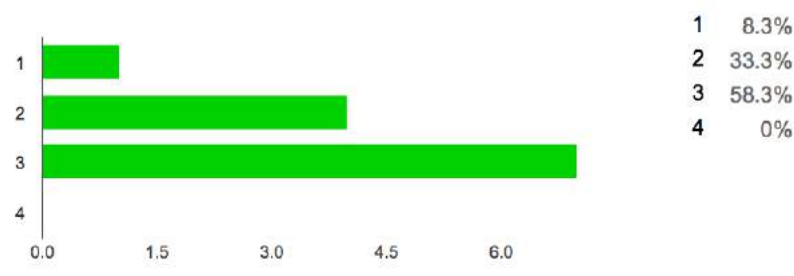
Enthusiasm



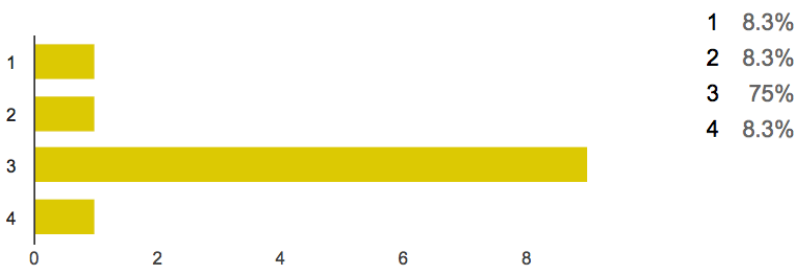
Honesty



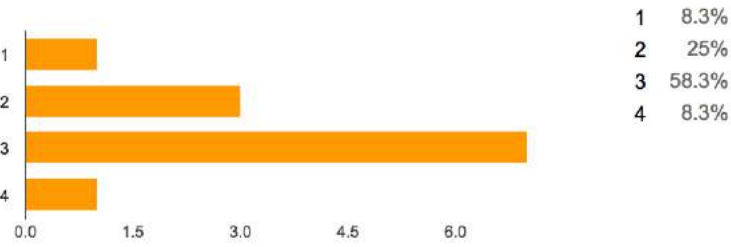
Initiative



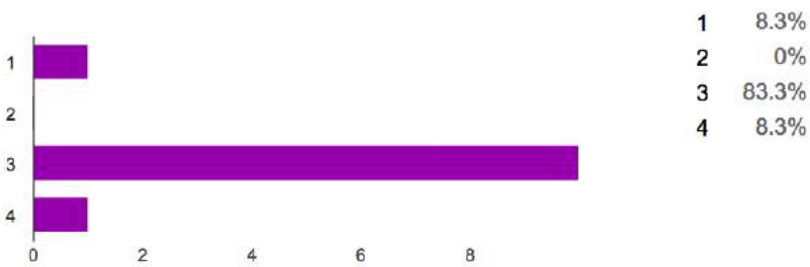
Communication



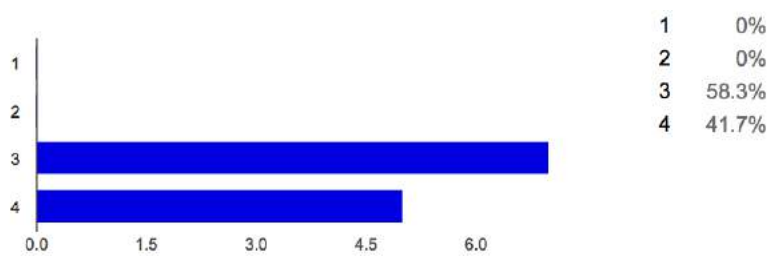
Self-Management



Following Instructions



Punctuality



In general the above results show that the majority of respondents are satisfied or very satisfied with graduate attitude in the above areas. Graduate reliability, ability to follow instructions, communication skills, initiative, honesty, enthusiasm and punctuality are all rated highly. While still rated highly self-management and communication are the areas rated less high.

Summary

With almost one in six jobs in New Zealand and over 70% of product exports dependent on the Primary Industries, there is an unequivocal need for skilled employees to make this happen.

Some indications from the farming sector are that concerns over skills and recruitment of skilled employees is decreasing although remaining in the top 10 concerns. Anecdotally this is still a big concern.

The number of farmers who took part in the survey is not sufficient to provide reliable quantitative data. It is aimed at providing insight into whether the graduates of the Level 3 programme achieved the aptitude and attitude as expected by employers and work experience farmers.

There were some mixed views of what should be expected of a graduate. This was generally understood that basic skills were required. Some mentioning the additional learning that would take place in their first year of employment or level 4 study.

Even in areas where employers were asking about specific skills they would often mentioned attitude, trust, initiative. Additionally, many listed skills such as ability to listen, have to be able to trust them and adjust when things don't do to plan. One stated that "trust, respect and work ethic are more important than knowledge".

The results from this survey highlights the need to undertake further research with increased farmer engagement. This will enable a better understanding of farmer expectations for the quantitative (skills) versus qualitative (attitude) graduate outcomes. This in turn can provide better linkage between training providers and farmers ensuring future graduate outcomes are relevant and fit for purpose.

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Appendix - Survey

Graduate ability vs employer expectations

As part of the Kellogg Rural Leadership Programme I am required to undertake a research project. I have chosen to look into how well the ability of graduates of a Level 3 programme meet employer expectations. I will also be presenting the results of this survey to Taratahi's Leadership Team for their consideration.

For those of you who haven't met me, my name is Paul Crick and I am the Sheep and Beef Manager at Taratahi.

You have been asked to complete this survey because you have previously taken on a Taratahi Level 3 graduate for the work experience placement component of their 'second year' programme.

One of the significant challenges facing the vocational agricultural training sector is to increase the demand for training and the number of skilled graduates entering the industry in order to address the sector's need for additional trained and skilled workers. Productivity increases will be achieved faster by more skilled people with more knowledge and a keen focus on best practice farm management.

Level 3 qualifications provide an important foundation for graduates entering or preparing to enter the industry.

Graduates from Taratahi's National Certificate in Farming Skills (Work Ready) Level 3 programme (the 'first year programme') start their careers on farm in entry level positions such as junior shepherds or as part of their ongoing study as 'second year'/level 4 students.

The purpose of this survey is to find out if graduates from this Level 3 programme have attained the level of skill, knowledge and attitude that meets employer/work experience farmer expectation of an entry level employee.

Please answer honestly. Your survey is anonymous and cannot be linked back to you (unless you choose to provide your details in the last questions of this survey). Thank you for taking the time to complete this survey. Please complete this survey by Friday 13 November 2015.

All completed surveys will go into a draw to win a \$150 Lonestar voucher. Either complete your details in the appropriate section below or, if you would like to remain anonymous, email me at

paul.crick@taratahi.ac.nz.

Your time is much appreciated.
Paul Crick

Your farming business

What is the size of your farming business?*

- ☐ <100ha
- ☐ 101 - 500ha
- ☐ 501 - 1000ha
- ☐ 1001 - 2000ha
- ☐ 2001 - 3000ha
- ☐ >3000ha

How many employees do you currently employ when fully staffed? please note FTE = Full Time Employee.*

- ☐ none i.e. just yourself
- ☐ 1 FTE
- ☐ 2 FTE
- ☐ 3 FTE
- ☐ 4 FTE
- ☐ 5+ FTE

What is your involvement in the wider agricultural industry, such as, discussion groups, industry good groups or research and development? If none, please go to next question.

Your involvement with Taratahi

How long have you been a 'second year' work experience farmer for Taratahi?*

- ☐ < 1 year
- ☐ 1-2 years
- ☐ 3-4 years
- ☐ 4-5 years
- ☐ 5-6 years
- ☐ 6+ years

How many students have you taken on for Taratahi over this time period? *

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10+

How many Taratahi graduates have you employed?*

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10+

How many of these completed their second year work experience placement on your farm?*

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5+

Do you have any other interaction with Taratahi (other than as a work experience farmer)? If so, please explain.

Your understanding of the programme

How familiar are you with the NZQA unit standards/required outcomes associated with this programme?*

- ☐ I don't know what you are talking about
- ☐ I am not at all familiar with them
- ☐ I am familiar with them
- ☐ I am very familiar with them

Did you have any input into the development of the programme?*

- ☐ Yes
- ☐ No

If so, in what capacity?

Stock handling

What are your expectations of a graduate's stock skills and knowledge?

How well does a Taratahi Level 3 graduate generally meet these expectations?

- ☐ They have quite some way to go
- ☐ They are close to meeting expectations
- ☐ They meet expectations
- ☐ They exceed expectations

Do you have any further comments?

Health and Safety

What are your expectations of a graduate's understanding and awareness of health and safety practices on farm?

How well does a Taratahi Level 3 graduate generally meet these expectations?

- ☐ They have quite some way to go
- ☐ They are close to meeting expectations
- ☐ They meet expectations
- ☐ They exceed expectations

Do you have any further comments?

Fencing

What are your expectations of a graduate's fencing skills and knowledge?

How well does a Taratahi Level 3 graduate generally meet these expectations?

- ☐ They have quite some way to go
- ☐ They are close to meeting expectations
- ☐ They meet expectations
- ☐ They exceed expectations

Do you have any further comments?

Hand piece work

What are your expectations of a graduate's hand piece skills?

How well does a Taratahi Level 3 graduate generally meet these expectations?

- ☐ They have quite some way to go
- ☐ They are close to meeting expectations
- ☐ They meet expectations
- ☐ They exceed expectations

Do you have any further comments?

Agrichemicals

What are your expectations of a graduate's agrichemical skills and knowledge?

How well does a Taratahi Level 3 graduate generally meet these expectations?

- ☐ They have quite some way to go
- ☐ They are close to meeting expectations
- ☐ They meet expectations
- ☐ They exceed expectations

Do you have any further comments?

Water work

What are your expectations of a graduate's water work skills and knowledge?

How well does a Taratahi Level 3 graduate generally meet these expectations?

- ☐ They have quite some way to go
- ☐ They are close to meeting expectations
- ☐ They meet expectations
- ☐ They exceed expectations

Do you have any further comments?

Butchery

What are your expectations of a graduate's skills in butchery?

How well does a Taratahi Level 3 graduate generally meet these expectations?

- ☐ They have quite some way to go
- ☐ They are close to meeting expectations
- ☐ They meet expectations
- ☐ They exceed expectations

Do you have any further comments?

Attitude

Please rate, on a scale of 1 - 4, how satisfied you have been (in general) with graduate attitude in the following areas.
1 = very unsatisfied 2 = unsatisfied 3 = satisfied and 4 = very satisfied

	1	2	3	4
Reliability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Punctuality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Self management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiasm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Initiative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Following instructions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Honesty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you wish to be contacted to discuss your feedback please provide your contact details below.

If you wish to go into the draw to win a \$150 Lonestar voucher please complete details below.
Please indicate yes and if you have not already provided your contact details, provide these below.

If you wish to be provided with a copy of the survey results please email me at paul.crick@taratahi.ac.nz

Thank you.