



**Ministry of Education**  
Work Integrated Learning in Schools

**GoodMeasure Portfolio Overview**

November 2023





# Executive Summary

From May – Nov 2023, ImpactLab partnered with the Ministry of Education to better understand the value of schools supporting students to positively transition from education to employment through Work Integrated Learning programmes. Four programmes, all with differing industry foci, programme structure, and unique local contexts, were selected to identify and assess the value of Work Integrated Learning programmes, through our GoodMeasure tool.

- **Aquaculture Academy (Queen Charlotte College)** - provides a unique learning experience for students who are interested in the ocean, science, or hands-on mahi with course material that is flexible, allowing students to align their learning with their interests, and priorities, or with the opportunities that arise through their relationships with aquaculture businesses.
- **P-TECH (Manurewa High School)** - is a five-year programme that combines secondary education, tertiary pathways, and industry partnerships to develop students' skills and knowledge in digital technology industries whilst building their career readiness.
- **Primary Industry Academy (Geraldine High School)** – is centred around a curriculum driven by a 'learn by doing' approach, allowing students to develop strong practical skills and gain industry-relevant qualifications through hands-on work and real-world practice within primary industries.
- **Ringa Raupā (Ōpōtiki College)** - provides an alternative pathway for students to earn their NCEA L3 and L3 pre-apprenticeship Building and Construction Industry Training Organisation (BCITO) accreditations through hands-on mahi of building homes to be used in Ōpōtiki by Kāinga Ora.

Despite the differences among the selected programmes, the four programmes all demonstrated the following evidence-based key features for effective Work Integrated Learning programmes:

1. **Strengths-based careers education:** Students receive exposure to and education regarding a range of diverse careers, including how these career paths link to education/training pathways.
2. **Tailored transition support:** Students have access to education and guidance navigating their transition out of secondary schooling, from behavioural support, to practical education, and emotional guidance.
3. **Authentic learning experiences:** Students have the opportunity to practice what they are learning in the classroom out in the field, allowing them the chance for exploration and testing.

Given the current programme delivery model, data collection practice, and investment required for delivery, the estimated social return on investment (SROI) for the four selected programmes were all positive and fell within the range of \$1:\$1.40 - \$1:\$9.40. These results tell a compelling impact story of the wide-ranging impact that effective Work Integrated Learning programmes can have on secondary students who are at a critical point in their life course. Evidence was found linking these programmes to support a diverse array of student outcomes, including: improvements in mental health, increases in academic achievement, employment, drivers' licensing, specialised skills, and STEM achievement, as well as reductions in addiction, emergency benefit uptake, offending, and risky behaviour.

# Agenda

1. **Overview of context**
2. **Comparative analysis of GoodMeasure results**
  - How can we compare these programmes?
  - Key insights from comparative analysis
3. **Investment**
  - Starting a programme
  - Sustaining and developing a programme
4. **Population**
5. **Opportunity**
  - Gender
  - Ethnicity
  - Disability and neurodiversity
  - Age
  - Further considerations: NEET
6. **Impact & Effectiveness**
  - Review of the state of the literature
  - Intervention logic
  - Inputs of effective programmes
  - Activities of effective programmes
  - Outputs of effective programmes
  - Outcomes
7. **Future considerations**
  - Data framework
  - Network of schools
8. **Appendix**



# How can you know the good you do?

Impact is uncertain and hard to quantify.

Social Value is one lens through which to consider and measure impact.

## How ImpactLab estimates social value

**Social value is the estimated social impact in dollar terms that a programme achieves for participants over their lifetime.**

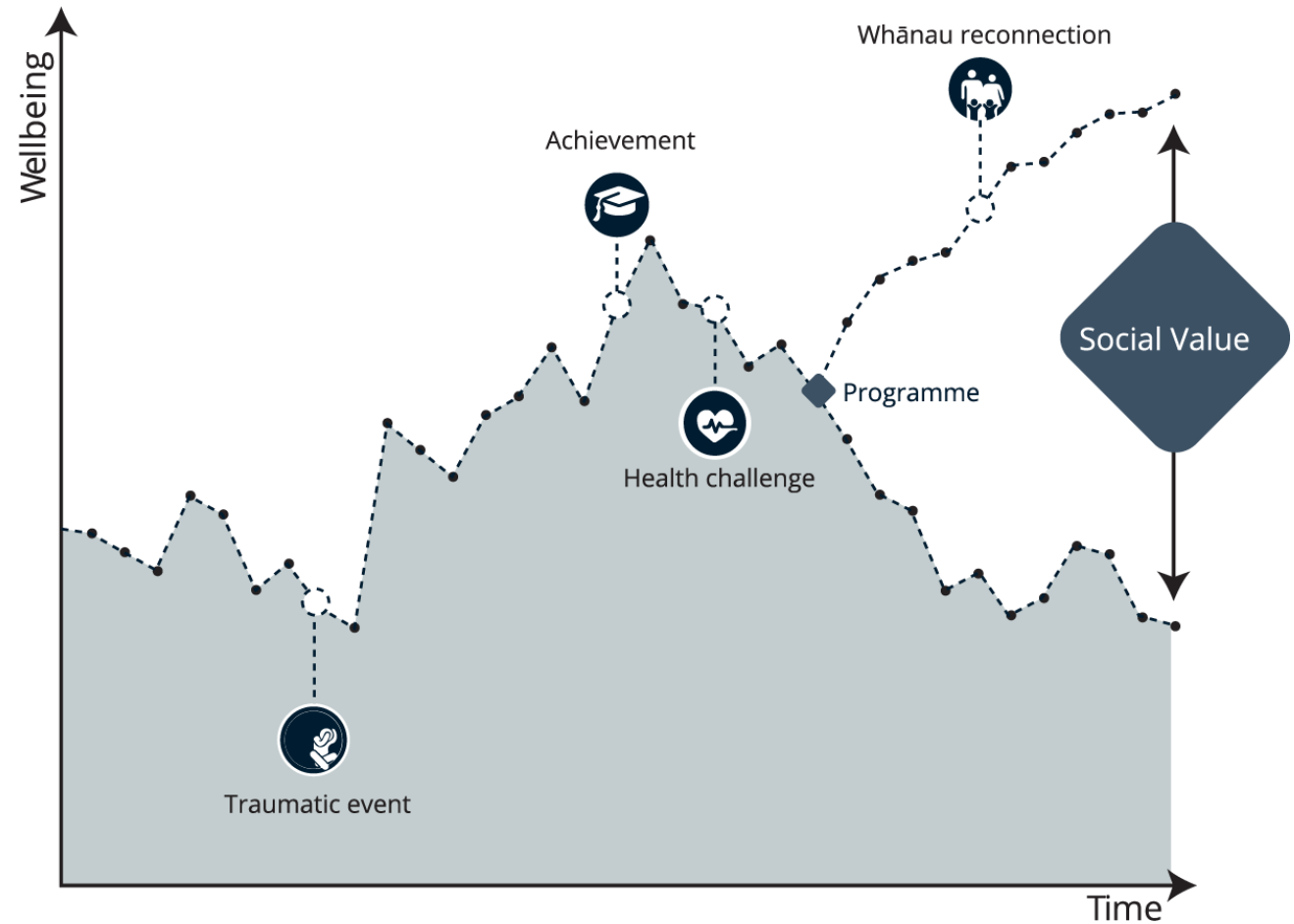
Throughout our lives, different events occur that impact our overall wellbeing journey. ImpactLab measures the impact on an individual's wellbeing across multiple domains when they're supported by a programme to make positive changes in their life.

We measure this impact in terms of both positive benefits (such as increased income) and avoided costs to government.

To calculate social value, we combine these impact values with

- Evidence from global literature about how effective a programme can be.
- The size of the opportunity for the people an organisation serves to achieve more positive outcomes.
- The number of people supported.

By combining these inputs, the social value calculation helps us understand how a programme or intervention helps change lives for the better. We combine the social value with cost information to calculate a programme's social return on investment.



# Key questions to measure social value

Who?

Who do you serve, and what is the opportunity to make a difference for those people?



Opportunity

What change?

What positive long-term changes in peoples' lives does this help to create?



Impact

To what extent?

How effective do we expect it to be at creating those changes?



Effectiveness

At what scale?

How many people do you reach, and how many engage long enough to meaningfully benefit?



Population

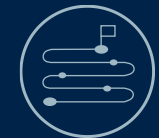


Social  value



Cost

Social Return on Investment





**Context**

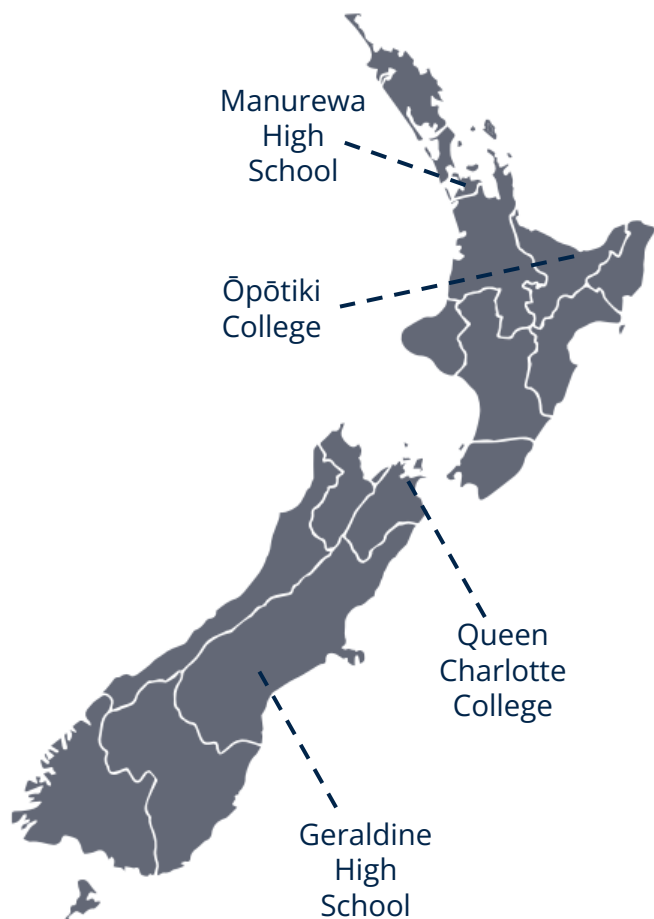


# Programmes

Programme	Industry	Year begun	Duration	Key differentiators
Aquaculture Academy	Aquaculture	2005	Can be a 1-3 year journey	<ul style="list-style-type: none"> <li>Through industry partnerships, has access to a variety of equipment at the school (e.g., wetlab), allowing for students to conduct their own research</li> <li>Provides opportunity to receive scholarships/prizes provided by industry partners</li> </ul>
Pathways in Technology (P-TECH)	STEM	2019	5 year journey	<ul style="list-style-type: none"> <li>International education reform initiative</li> <li>Dual enrollment with tertiary partners</li> <li>Provides mentorship, workplace experience, and internship opportunities with industry partners</li> </ul>
Primary Industry Academy	Agriculture, forestry, horticulture	2012	Can be a 1-3 year journey	<ul style="list-style-type: none"> <li>L2 students have a work placement with a local industry partner</li> <li>Provides dedicated support to students to improve attendance</li> <li>Provides opportunities for students to participate in fieldtrips, events, and competitions</li> </ul>
Ringa Raupā	Construction	2022	1 year journey	<ul style="list-style-type: none"> <li>Programme was created and is currently sustained through a partnership with iwi (Te Whakatōhea)</li> <li>Programme replaces mainstream school entirely – students do not attend any mainstream school classes at the College</li> <li>There is an additional NEET cohort of Ringa Raupā</li> </ul>



# Schools



Programme	Aquaculture Academy	P-TECH	Primary Industry Academy	Ringa Raupā
School	Queen Charlotte College	Manurewa High School	Geraldine High School	Ōpōtiki College
<b>School type</b>	Secondary (Year 7-15)	Secondary (Year 9-15)	Secondary (Year 7-15)	Secondary (Year 9-15)
<b>School size (total roll)</b>	Small (~400 students)	Large (~2,000 students)	Medium (~600 students)	Small (~300 students)
<b>Education region</b>	Nelson/ Marlborough/ West Coast	Auckland	Canterbury/ Chatham Islands	Bay of Plenty/ Wairariki
<b>Ethnicity profile (school)</b>	High European/ Pākehā population	Majority Māori and Pacific population	Majority European/ Pākehā population	Majority Māori population
<b>EQI (2023)</b>	487	510	451	536
<b>Retention* (2022)</b>	69%	73%	80%	63%
<b>Percentage with NCEA level 3 or above (2022)</b>	30%	41%	33%	40%

Source for EQI: [2023-EQI-numbers-All-schools-and-kura.xlsx \(live.com\)](https://live.com)

Source for other school data: [Education Counts Home](#) | [Education Counts](#)

\*This is the % of students who remain at school after the age of 17, 1-year post-mandatory age



## **Comparative analysis**

How do the programmes'  
social value metrics  
compare?

## Comparability insights – How do we compare these programmes?

Social value metrics provide teams with a data-driven lens to understand the impact that a programme is estimated to have on those that it serves. Social value metrics are not the only way to understand impact; in fact, they often complement other ways of capturing value, such as narrative insights.

In order to meaningfully compare the social value metrics of the programmes, the metrics must be viewed within the larger context that they sit in. A higher social value per person or SROI does not necessarily indicate that one programme is “better” than another. The following items must be considered when comparing the programmes’ social value metrics:

- **Structure of the programme:** While they are all categorised as a “Work Integrated Learning programme”, the programmes (even in this small sample) are structured differently. The programmes’ intended duration of student engagement can vary (e.g., 1-5 years), and their integration with mainstream schools can differ (e.g., offering dual enrollment, entirely replacing school).
- **Students:** Not all programmes will be serving the same types of students. While one school may be intentionally working with (or targeting) those who are disengaging from mainstream school, other programmes may be more “universal”, focusing on engaging with any student with an interest in a specific sector. Depending on the students participating, specific programmes may have more opportunities to create a positive shift in their life trajectories.
- **Local community and school context:** One cannot ignore the larger context that the programme is delivering its programmes in. A building academy delivered one way in a location does not necessarily mean it will be equally successful or meaningful in another. Programmes that target the local community’s context may better support students to effectively navigate their path after secondary school.
- **Data availability:** Some programmes may have more data about their students than others – this can allow social value analysis to be done at a more granular scale, often increasing the social value that can be captured through measurement.
- **Sustainability of programme:** One programme having a comparatively higher SROI than another does not necessarily mean it is sustainable. Some programmes are heavily reliant on unofficial volunteer hours of staff to run as is.
- **Stage of programme development:** Some programmes have a rich history, while others are still early in their journey. There are often cost efficiencies that aren’t realised when programmes are still in the pilot stages of development.



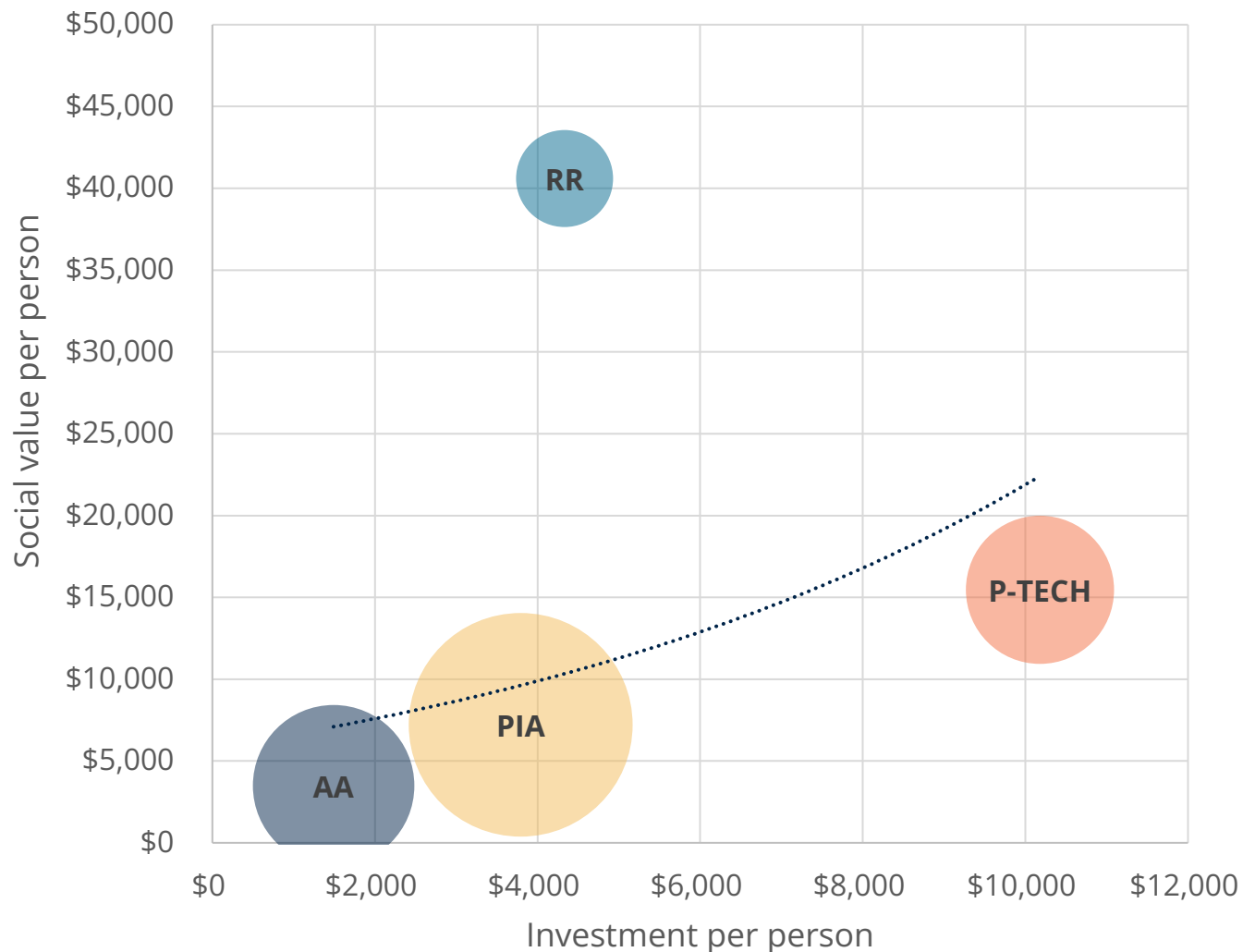
# Overview of social value metrics

## Comparative analysis

		Aquaculture Academy	P-TECH	Primary Industry Academy	Ringa Raupā
Investment	Total investment	\$43,216	\$223,980	\$182,000	\$39,000
	Investment per student	\$1,490	\$10,181	\$3,792	\$4,333
Social value	Total social value	\$87,219	\$324,715	\$346,154	\$365,429
	Social value per person	\$3,489	\$15,463	\$7,212	\$40,603
SROI		\$1:\$2.00	\$1:\$1.40	\$1:\$1.90	\$1:\$9.40

## Comparative analysis

### Relationship of investment per person and social value per person



**AA** = Aquaculture Academy  
**P-TECH** = Pathways in Technology  
**PIA** = Primary Industry Academy  
**RR** = Ringa Raupā

The trendline (dotted) shows that there is a **positive relationship between cost per person and social value per person**. Please note that this trendline was drawn based on the metrics of the four programmes measured.

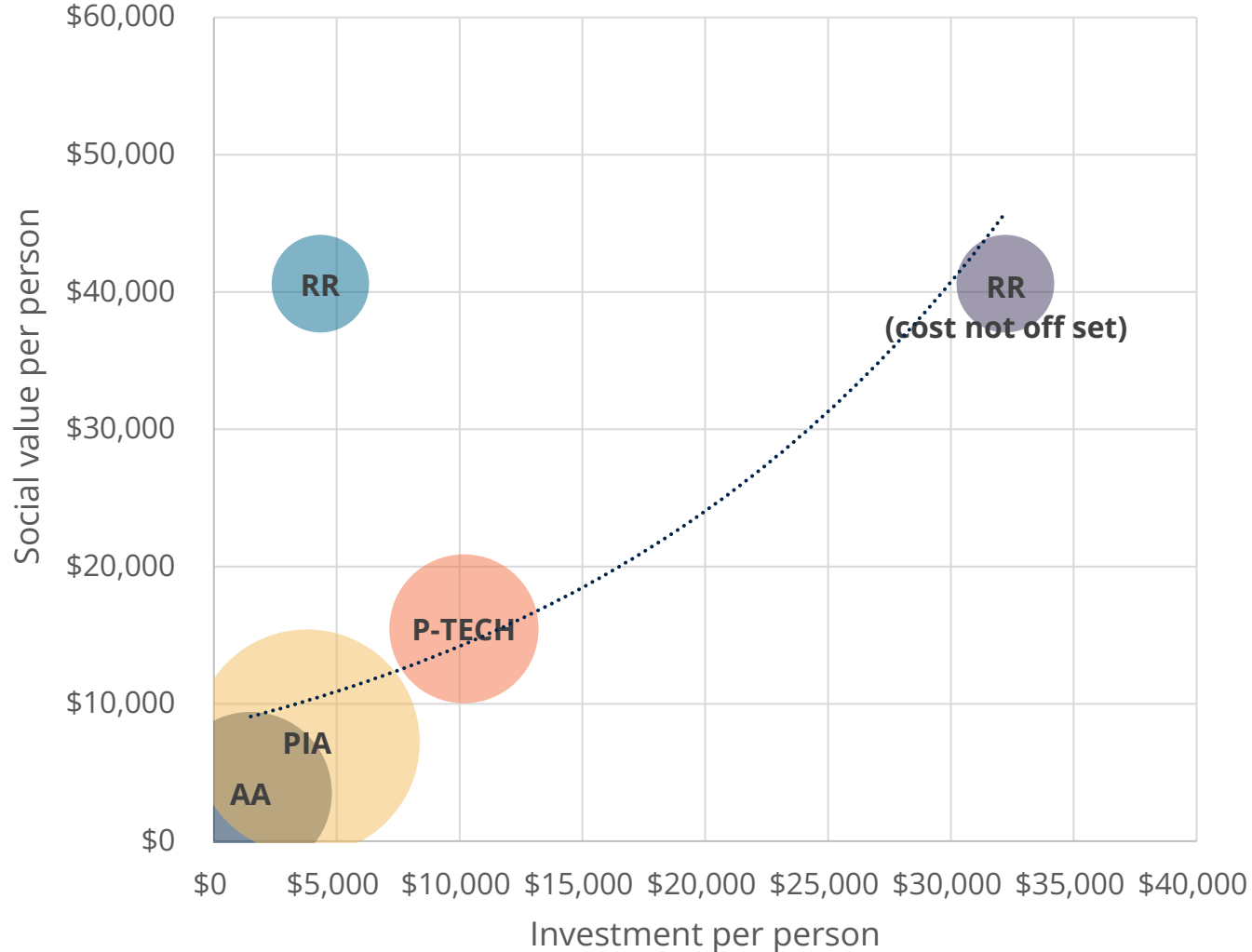
Ringa Raupā is the clear outlier. The targeted and intensive nature of the programme illustrates an impact story in which it is creating a significant amount of social value for a limited number of students.

\*The size of the bubbles represents the total number of participants engaging.

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The “social enterprise” structure of the programme (where they build and sell homes to Kāinga Ora) offsets a significant portion of the costs. If we were to not offset the cost of the programme through the sale of the house, RR (purple bubble) would follow a similar trendline as the other programmes. This is important to keep in mind as if Ringa Raupā aren’t able to sell the house, the investment required will no longer be offset by the revenue, creating a much higher investment per person figure.

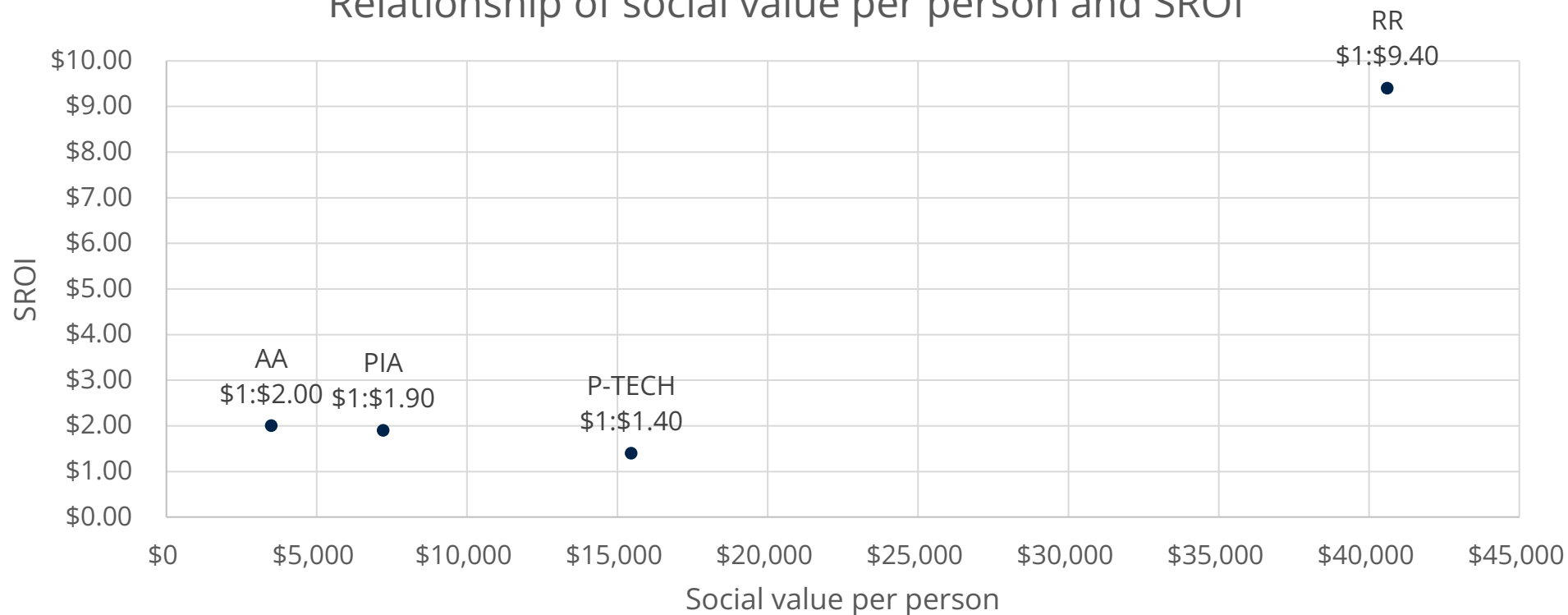
\*The size of the bubbles represents the total number of participants engaging.



All programmes are delivering a **positive social return on investment (SROI)**, with a wide range of SROI across the 4 programmes: \$1.40 - \$9.40.

P-TECH has the lowest SROI (\$1:\$1.40) among the programmes, however, creates the third-highest social value per person. This shows that one metric alone cannot tell the entire impact story of a programme. The graph below indicates that P-TECH requires a higher investment per person to create social value for its students, not necessarily that its less impactful than others.

### Relationship of social value per person and SROI



**AA** = Aquaculture Academy  
**P-TECH** = Pathways in Technology  
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**Investment**

## **Starting a programme**

What are the key factors and investment that must be aligned to start a Work Integrated Learning programme in schools?





The three points below were identified as key factors that can be either enablers or barriers for schools when starting a Work Integrated Learning programme – all three need to be aligned at the same time for a programme to go from an idea to launch.

### 1. School readiness

- **Ability to prioritise programme** – The school must be in the right environment to be able to prioritise starting a programme like this (e.g., no crisis). In other words, programme teams must strike while the iron is hot – it might take a few years for the school to be able to consider something like this and thus, need to have patience with the process.
- **Team readiness** – Friction between the programme and other school departments was noted as a challenge. School leadership must work strongly to get other school departments on board with the programme by communicating that the programme will not be re-directing or taking away any funding from other departments and sharing opportunities and in-kind investments.

### 2. School leadership

- **Delegation** – For most schools, there would be a dedicated programme manager who would be leading the start-up and development of the programme. School leadership must develop trust with the programme manager so they are able to appropriately delegate and allow the manager to lead independently. Micro-managing can significantly hamper the start-up process.






### 3. Key programme champion

- **Time & passion** – Once a programme is funded and up and running, the programme manager will be paid, but the pitching and starting process is often a completely unpaid endeavour. There needs to be at least one key programme champion to advocate for the programme and secure investment and buy-in from key players.
- **Connections** – The key programme champion must often organise and secure investment and industry partners. In order to do this, this individual must also have connections within the local community to get the right people involved in the mahi.

	Financial investment	In-kind investment	Notes
<b>Aquaculture Academy</b>	<ul style="list-style-type: none"> <li>\$5,000 (Schwass Family Trust)</li> <li>\$5,000 - \$10,000 (MoE)</li> </ul>	<ul style="list-style-type: none"> <li>EDAL – provided time and expertise to set up the business plan for the Aquaculture Academy.</li> <li>Various industry partners – provided donation of time, food, and other in-kind donations for the launch of the programme.</li> </ul>	<ul style="list-style-type: none"> <li>Held a launch event to kick off the Academy, where the community, industry partners, MoE, and other key players were in attendance. This helped to communicate the exciting vision for the Academy and get different stakeholders' buy-in.</li> </ul>
<b>Pathways in Technology (P-TECH)</b>	<ul style="list-style-type: none"> <li>\$12,500 (MoE – for PLD and programme development)</li> </ul>	<ul style="list-style-type: none"> <li>School/programme leadership – members who were part of the Steering Committee committed voluntary hours to get the programme off the ground.</li> </ul>	<ul style="list-style-type: none"> <li>Most of the funding was secured through IBM. They led discussions with MoE and business partners to get the work funded.</li> </ul>
<b>Primary Industry Academy</b>	The current school and programme leadership did not have context on the investment required to set up the programme.		
<b>Ringa Raupā</b>	<ul style="list-style-type: none"> <li>\$40,000 (Te Whakatōhea – for site development)</li> <li>\$15,000 (Te Whakatōhea – for tools and equipment)</li> </ul>	<ul style="list-style-type: none"> <li>No significant in-kind investments were noted.</li> </ul>	<ul style="list-style-type: none"> <li>The initial financial investment from Te Whakatōhea for the site development and tools and equipment was paid back in full with the profit from house sale.</li> </ul>

## **Sustaining and Developing a Programme**

What is the investment needed to sustain a Work Integrated Learning programme in schools? What investment related challenges are schools facing to sustain and develop their programme?

-  It truly is an investment – **delivering an impactful Work Integrated Learning programme does not happen overnight.** Investment must be sustained over a long period of time, in order to:
  - Develop identity spaces
  - Cultivate and grow relationships with key industry partners
  - Increase local community awareness of the programme and its students
  - Retain passionate and experienced staff who connect with students
-  Many programmes are **reliant on informal financial or in-kind contributions.** While this speaks to the strength of the relationships that the schools build with industry partners and other local community members, it also exposes the programmes to a high level of risk. Because there is nothing formal about the agreement, contributors may pull their contributions at any time.
  -  PIA fundraises every year to meet the funding requirements for the course as they run it. A local farmer donates their potatoes for PIA to sell – this provides a good amount of revenue for the programme every year.
-  Some of the more **formal financial commitments are “unstable”** so it is hard for the schools to plan for the future.
  -  Currently, Ringa Raupā receives contracts from Kāinga Ora to build homes. The contract is drawn up every year. Due to high turnover at Kāinga Ora in the region, it has taken longer to secure these recently (e.g., only received the contract for this year in June 2023).

## BAU/ongoing investment

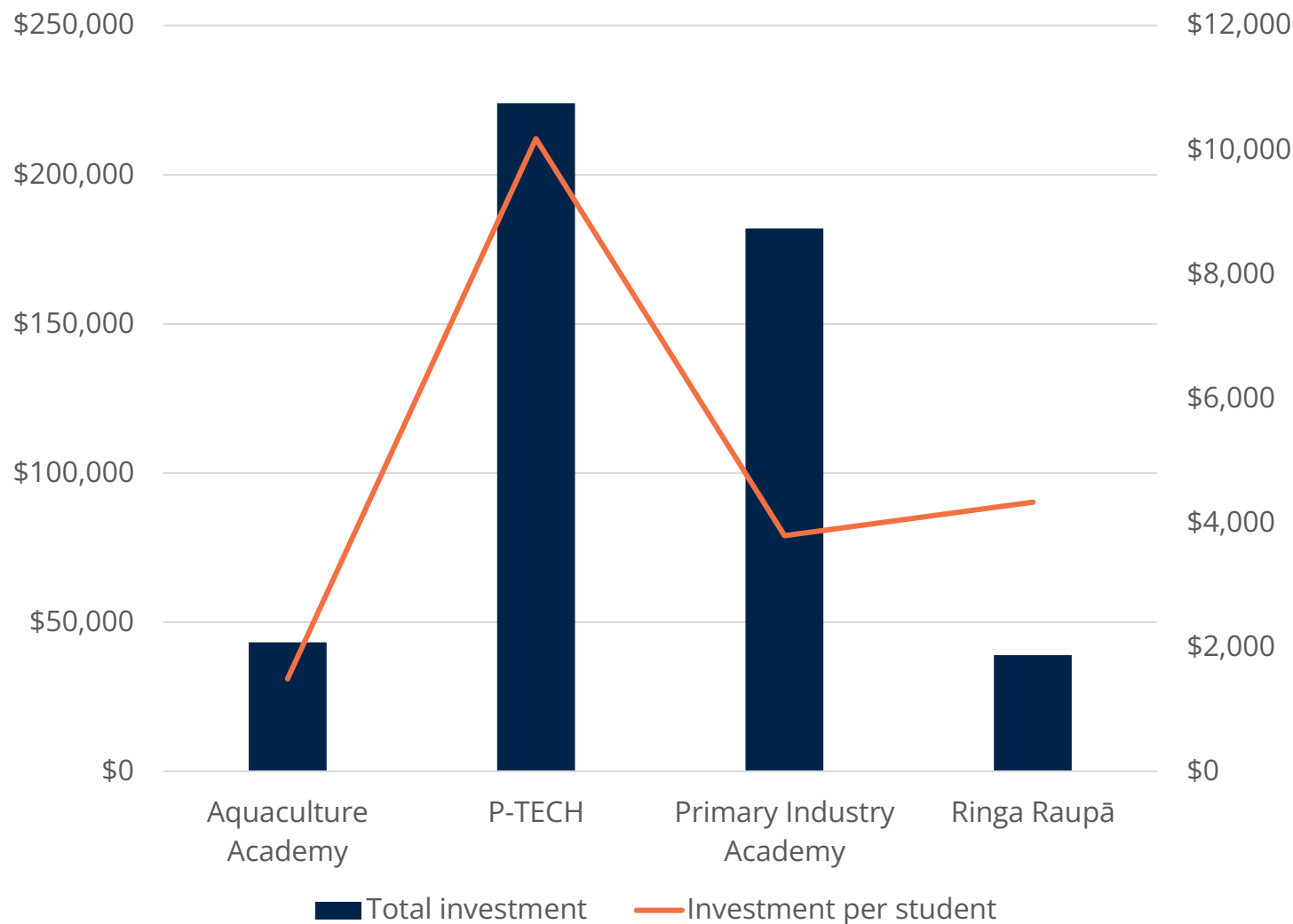
## Investment



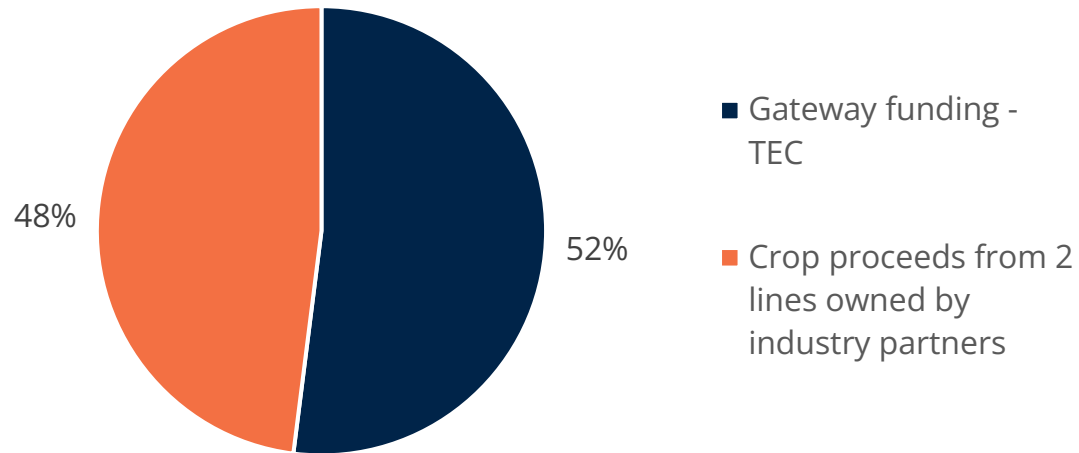
This graph visualizes the relationship between the total BAU or ongoing investment per programme and the investment per student per programme.

It shows that while Primary Industry Academy has a relatively high total programme cost when we understand that cost relative to the number of students it serves, it is much more modest.

Having said that, it is important to be aware of “hidden costs” that may be showing a cost per student that is significantly lower than actuality. For instance, the programme managers and coordinator at Primary Industry Academy work considerable overtime in a voluntary capacity. Therefore, there are wages that are not accounted for in the costs. In this sense, the current investment is not sustainable for the programme long-term, unless those who work in their capacities are willing to commit as many voluntary hours as they had.

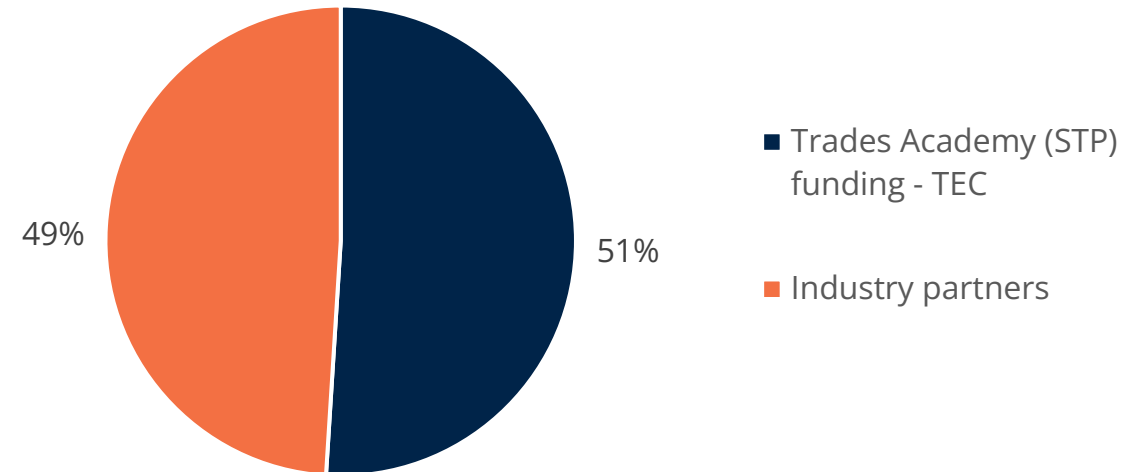


## Aquaculture Academy



- AA has an informal agreement (no contractual obligation) with industry partners (Schwass Family Trust and Sanford Limited), where AA receives all the profit from a mussel line owned by each of them. The Port Mussel Company supports the harvest of these lines. Through this agreement, **AA receives \$20,000-\$30,000/line/18 months.**
- AA also gets their barge maintained free of cost through their relationship with the local industry members.

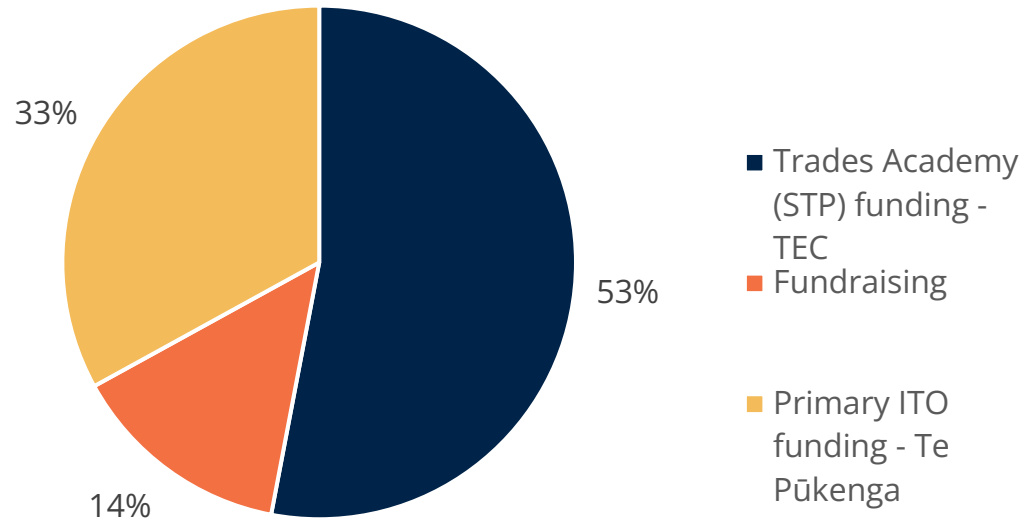
## P-TECH



- **Funding flows from the industry partners directly through the school** – and does not go into a P-TECH pool or IBM. Depending on the contributions from the partners, schools can have different levels of funding. These funds are tagged for P-TECH but IBM currently does not have any visibility/control to ensure this. Though the funding does not flow through IBM, IBM keeps a close eye on the budget and does some “creative accounting” to pay for joint events.
- Contributions from industry partners get confirmed on a yearly basis. Due to the macro environment, **it has become more challenging to secure funding.**

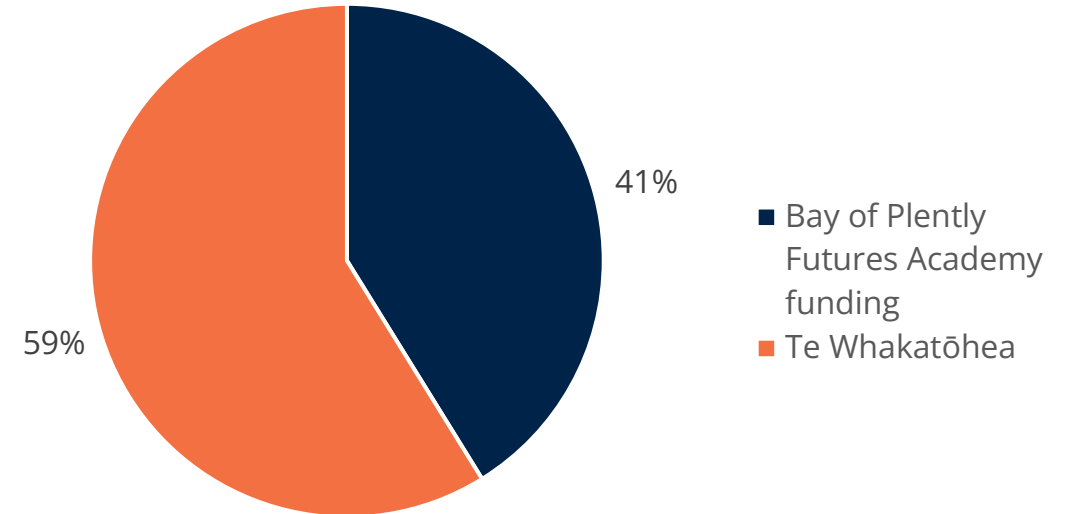


## Primary Industry Academy



- Programme manager and coordinator **fundraise every year in order to fund the programme.**
- Through PIA, students do community service (e.g., cyclone recovery). It was noted by the programme team that this helps to **spread positive awareness about the programme** in the community, encouraging local community members to contribute financially or materially to the programme.

## Ringa Raupā




- Ringa Raupā prioritises paying their staff well. For instance, next year, they are hiring 2 former Ringa Raupā students as apprentices. The programme is able to match what they would be able to earn elsewhere through funding from FA – this way, the programme hopes **to retain good staff over a long period of time.** The programme manager noted that salaries cannot be viewed through an education programme lens. To attract and retain talent, it needs to be a construction company before an education programme.

## One-off investments

 Even after programmes have been set up, schools noted that there are still **one-off costs** that are required to:

1. Maintain/replace equipment and tools
2. Keep programme relevant and keep course content aligned with industry standards

 Aquaculture Academy makes a surplus of around ~\$10,000 every year through the crop proceeds from the lines owned by their industry partners. This surplus is kept in the Aquaculture Academy fund and is **used for line upgrades, maintenance, new equipment, and other wishlist items.**

In the past, the Aquaculture Academy have received interest-free loans from the District Council and the College to pay for the barge and wet lab, respectively. This money was paid back in full by the money saved by the Academy over time.



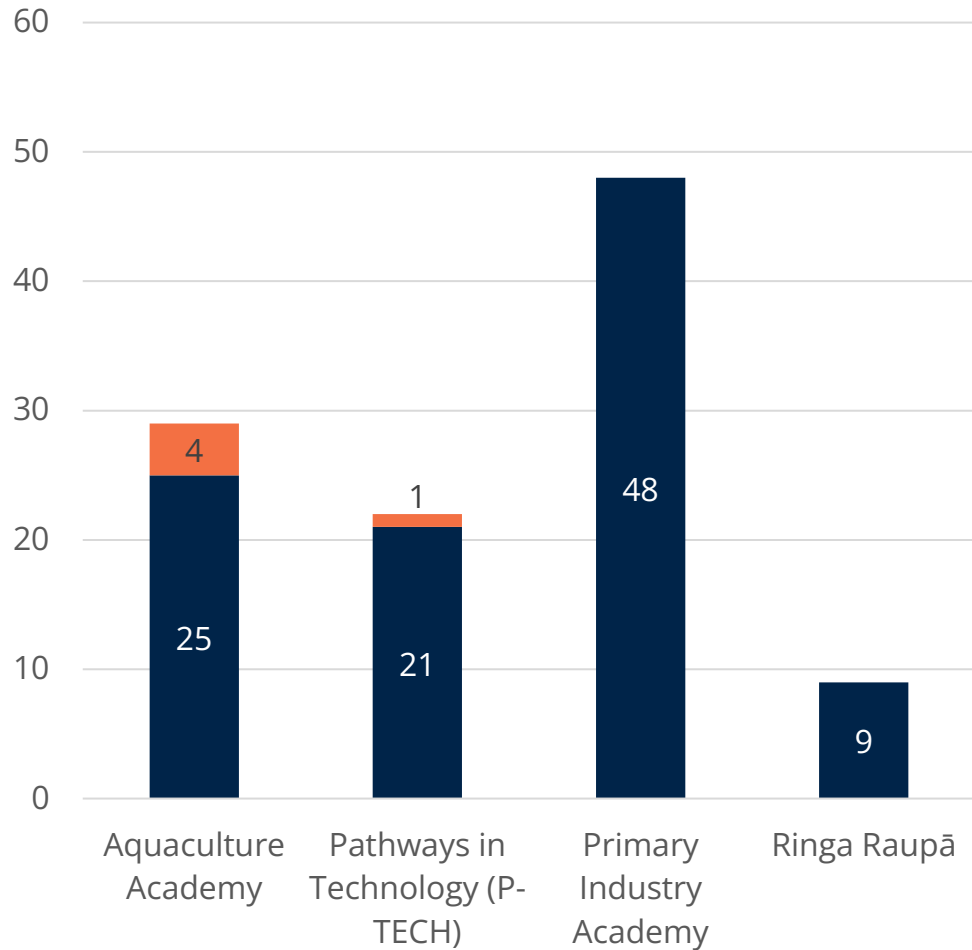
# Breakdown of Social Value through each lever: inputs and insights





## Population

How many people do you reach, and how many engage long enough to meaningfully benefit?



■ # of programme participants exiting early  
■ # of programme participants engaging



**High engagement rates (~85%+) across all programmes.** This may be due to the fact that the programmes are delivered in the school context.

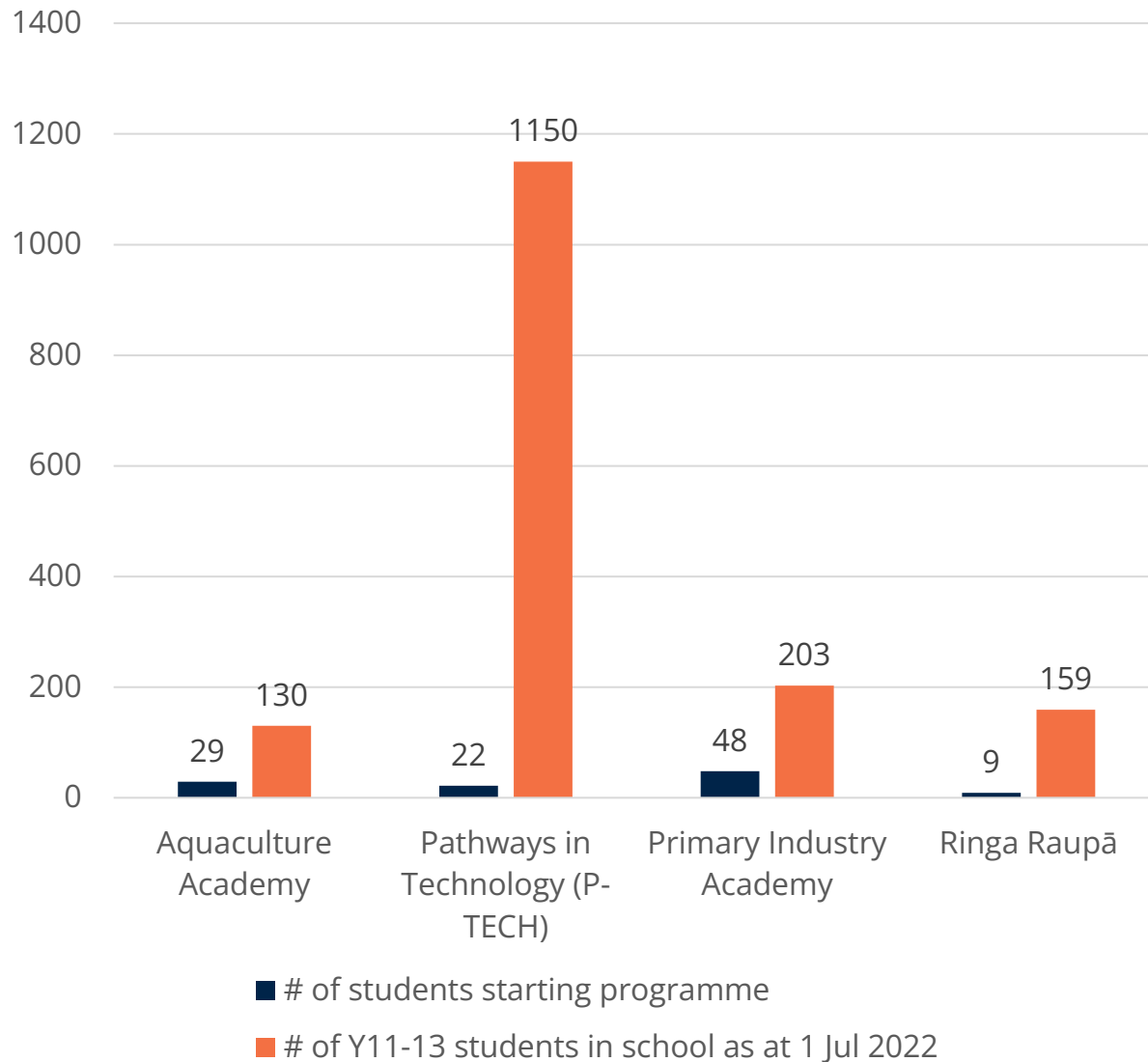


**Primary Industry Academy works with significantly more students** compared to the other programmes. While social value per person may be a median figure, it is creating it for more students than other programmes.

	# of programme participants starting	# of programme participants engaging	Engagement rate
<b>Aquaculture Academy</b>	29	25	86%
<b>Pathways in Technology (P-TECH)</b>	22	21	95%
<b>Primary Industry Academy</b>	48	48	100%
<b>Ringa Raupā</b>	9	9	100%

## Programme participation and school population

## Population



In comparison to the total number of Y11-13 students in the respective schools, **programmes are serving a limited/targeted # of students.**

That said, the proportion of the total school population reached varies significantly by programme – Primary Industry Academy reaches close to a quarter of its student population, whereas P-TECH reaches just 2%.

	# of students starting programme	# of students in Y11-13 in school (as at 1 Jul 2022)	% of school (# of programme participants/# of Y11-13 students)
<b>Aquaculture Academy</b>	29	130	22%
<b>Pathways in Technology (P-TECH)</b>	22	1150	2%
<b>Primary Industry Academy</b>	48	203	24%
<b>Ringa Raupā</b>	9	159	6%





## Opportunity

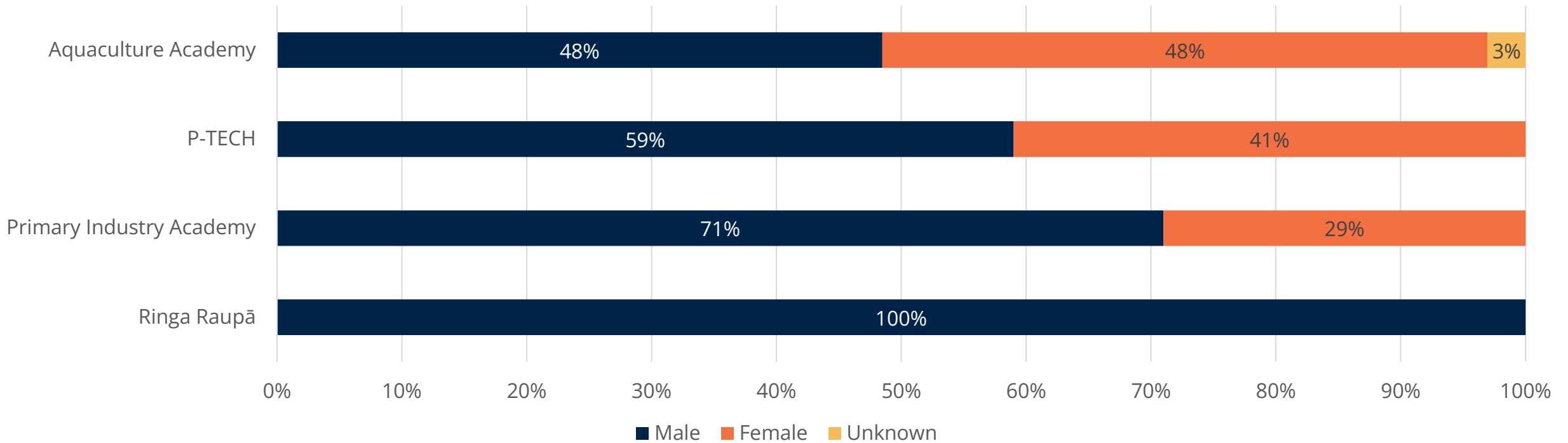
Who do you serve, and  
what is the opportunity  
to make a difference for  
those people?



Young women were significantly underrepresented in the programmes that were selected for this analysis. The sectors that were covered were traditionally male-dominated industries – to which young women may be less inclined to engage.

Could this analysis be conducted across a larger sample size of Work Integrated Learning Programmes?

Programme participants by gender



Due to rounding, numbers presented throughout this report may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

### ***Why focus on young women?***

For many young women, the transition to further education or employment is hindered by caring responsibilities. Women continue to disproportionately shoulder the lion's share of caring work in families, whether caring for their own children – from babies through to adolescents -, or caring for siblings, parents, grandparents, cousins, etc.

- In New Zealand, young women who have a child before the age of 19 are one of the highest risk groups for limited employment, with 77% of young mothers facing limited employment.
- When looking at broader family networks, women continue to take on a disproportionate amount of caring, emotional, and domestic labour and are more often the ones to sacrifice employment or education opportunities due to these responsibilities.
- For young women who face limited employment between the years 16-24, the long-term scarring effects may be amplified and compounded as women become the de facto caregiver and thus limit their future potential earnings/career growth.
- Young rangatahi Māori and Pacific youth are also disproportionately represented in this group, in part due to the intersectionality of risk factors and vulnerabilities that they face.

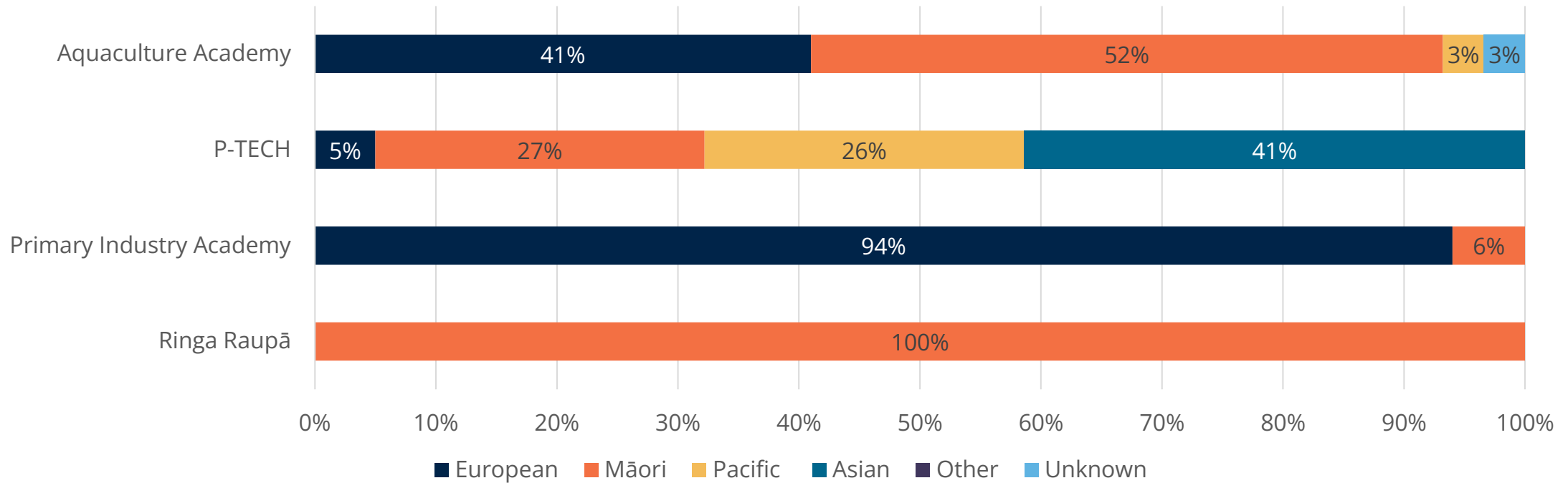
### ***What do young women need?***

- **Flexibility:** young women, both with and without caring responsibilities, benefit from programmes that are flexible and accommodating. For women with caring responsibilities, flexibility gives young women the space to juggle competing responsibilities without feeling like their education has to be sacrificed for their family.
- **Inclusivity:** in some cases, the reason a programme does not serve many female participants might be because the culture of the industry is not welcoming to women and thus women feel excluded. Programmes should help create the culture shift needed for women to thrive by promoting open, inclusive, and equal spaces.



Schools should consider tracking the breakdown of their programme participants by ethnicity and comparing it against the total school roll data for insight into how programme ethnic breakdown compares to school ethnic breakdown. This way, schools/programmes can better ensure that the programme is reaching all students who are well fit for and interested in the programme.

### Programme participants by ethnicity



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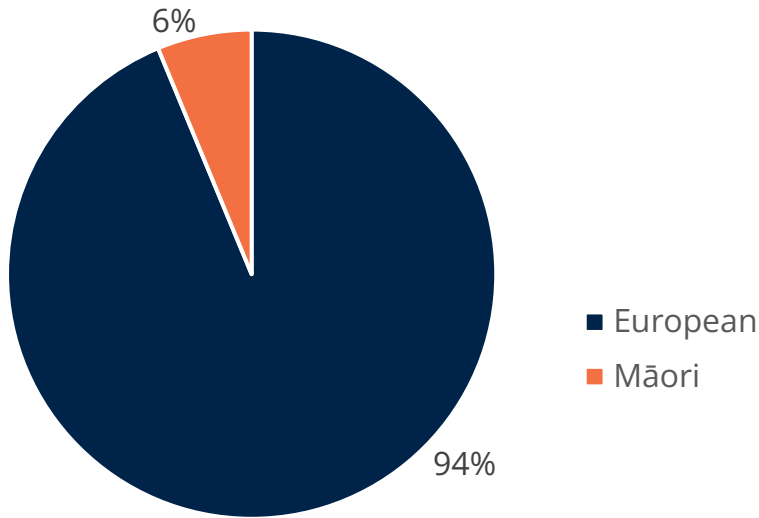


Even if programmes are not specifically targeting to reach specific populations, it is an important metric to keep track of – for instance, how does the programme ethnicity breakdown stack up in comparison to the school?

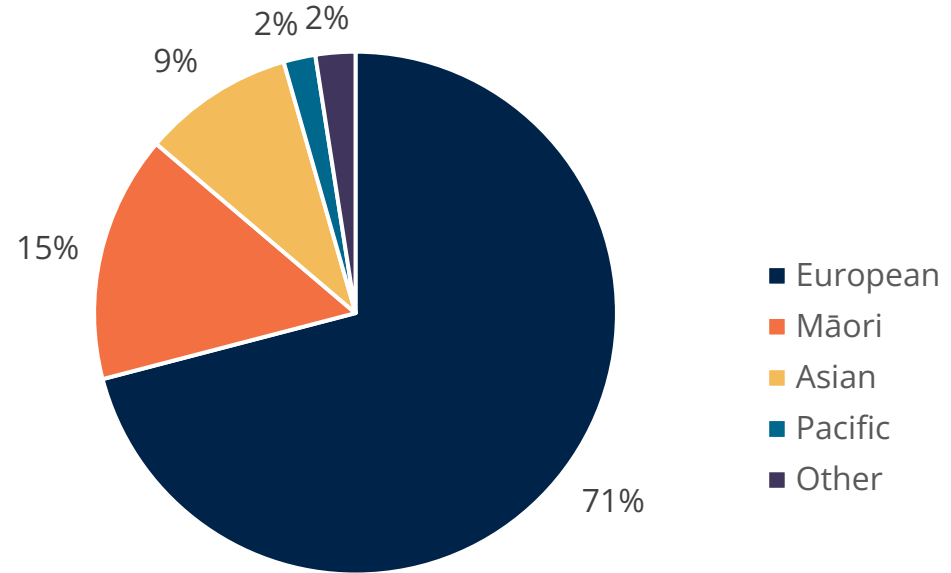


### Case example: Primary Industry Academy

Ethnicity of PIA participants  
(period in scope)



Geraldine High School roll (Y11-13+) by ethnicity  
(as of 1 July 2022)



### *Why focus on rangatahi Māori and Pacific youth?*

The inequities in education and employment for New Zealand's rangatahi Māori and Pacific youth are intrinsically linked with intergenerational exclusion and disadvantage. Māori and Pacific face the greatest hurdles across a range of social and financial domains – the high rates of limited employment for rangatahi Māori and Pacific youth are both a symptom and a reflection of these ongoing inequalities.

- In New Zealand, rangatahi Māori and Pacific youth are the ethnicities with the highest rates of youth in limited employment between the ages of 16-24, with 37% of rangatahi Māori and 28% of Pacific youth (22% of total population).
- Because of the multiple, intersecting complexities that many rangatahi Māori and Pacific youth face, there may be some large hurdles for individuals within this population to overcome.
- Rangatahi Māori and Pacific youth often experience exposure to racism throughout their interactions with public institutions and services, from education and employment services, to services like welfare and criminal justice.

### *What do rangatahi Māori and Pacific youth need?*

- **Strong relational support:** rangatahi Māori and Pacific youth have much to gain from strong relational support provided by mentors and role models in their lives, including teachers and other educators. Often, the relationship needs to be invested in before these youth build trust, openness, and reciprocity into their interactions; however, once this trust is built, these relationships can be crucial to the young persons' development.
- **Cultural care:** rangatahi Māori and Pacific youth benefit from programmes that not only acknowledge their culture but also support them in embracing their culture as a part of their identity. Connection to culture has been shown to support the holistic wellbeing of rangatahi Māori and Pacific youth, and programmes.





While most schools acknowledged the potential benefits of collecting data about students' disabilities and/or neurodivergence, most programmes did not have data on this. This information can not only support programmes to better accommodate their practices to the needs of the students it is serving but also provides a critical contextual layer to understand the impact created by the programme.



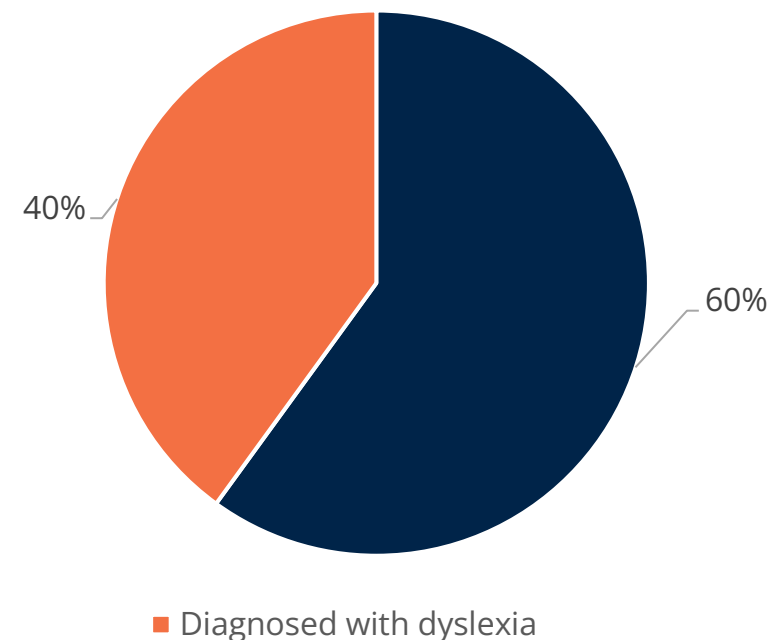
The one programme that did have robust data on the neurodivergence of its students was PIA at Geraldine High School.

All PIA students take a Literacy and Numeracy for Adults Assessment Tool (LNAAT) for Primary ITO. Those with low LNAAT scores are screened for dyslexia.

40% of PIA students during the period in scope are diagnosed with dyslexia.

The LNAAT data reveals that there are also other students who are not dyslexic but have limited literacy.

Neurodiversity of PIA participants  
(period in scope)



### ***Why focus on students with disabilities and/or neurodivergences?***

Students with disabilities and neurodivergences face unique challenges when transitioning between secondary education and further education or employment. Oftentimes, these students are moving from a school environment with a considerable degree of structure and predictability to an environment lacking the same structure, rules, and expectations. These students are often not provided with the support needed to make this transition smoothly.

Moreover, students with disabilities and/or neurodivergences often do not thrive under the learning conditions provided in mainstream education. Some will prefer to work with their hands, engaging in tactile and practical learning, whereas others might excel academically but need further educational support in areas like communication and soft skill building.

- Up to 32% of New Zealand's disabled and neurodiverse young people spend time in limited employment between 16-24.
- Disabled and neurodiverse young people often face discrimination in places of education or employment, as well as across multiple other areas. They may be underestimated and not recognised for the work they do, contributing to systemic inequalities and barriers.

### ***What do students with disabilities and/or neurodivergences need?***

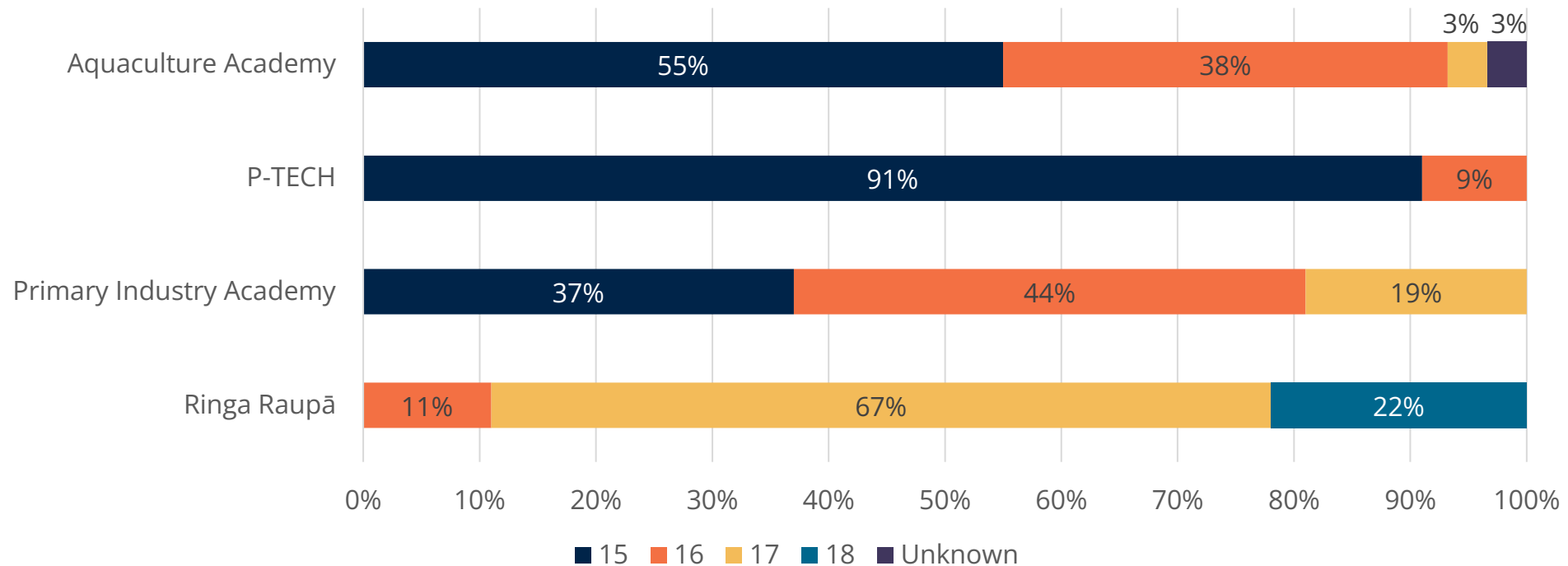
- **Active participation:** Students with disabilities and/or neurodivergences should be given the same opportunities to actively participate in the class and learning material as any other student. This will often mean making accommodations, whether with physical architecture, the activities, or the assessments and means promoting an inclusive environment where everyone feels as welcome to participate as one another.
- **Diverse experiences:** Giving disabled and neurodiverse students a wide range of exposure to different educational spaces, employment pathways and working environments can help these young people build an understanding of the diversity of options, engage their curiosity and learning, help to build a community and sense of belonging, whilst also giving them opportunities to learn the rules and routines of careers/tertiary education.



All 4 programmes are working with students that are 15+ at the start of their engagement with the programme.

Were there other programmes that were being considered for analysis that had taken a whole of secondary school approach?

Programme participants by age (at start of period in scope)



### ***What is a whole school approach?***

A whole school approach to careers education and transition readiness finds innovative opportunities where career exploration and engagement can be woven into education across a student's entire school career.

- Events like careers fairs, guest speakers, or visiting exhibitions, which can be attended by all students are, of course, an excellent way of learning about a large number of career paths all at once but may also be overwhelming if not accompanied by other forms of career's support.
- A whole school approach ensures that all students are exposed to careers education and some degree of career exploration, from their first years in secondary school (ideally, they would have started this earlier, in primary school!)
- Careers education should always be present, but in a subtle and at-times observational manner ("this x would be good for y"), allowing students to normalise the process of thinking about their future and what their options, interests, and goals might be.

### ***What does a whole school approach look like?***

- A whole school approach does not confine careers education to its own realm but instead integrates careers education throughout the regular curriculum by drawing attention to the relevancies and connections between the disciplinary spaces of learning and the real world. This might be teaching about how builders use maths, or exploring what transferrable skills can be built while studying history.
- Building the career-readiness skills of students – practical skills and soft skills – and ensuring that they are given opportunities to practice and reinforce them is a core goal of a whole school approach.
- Students may better leverage the student-teacher bond to learn more about various career paths. This is important as many adolescents may require some trust-building before they open up to teachers and are in a space where they are ready to receive and internalise support.
- Students begin to think about their futures and careers earlier, meaning that they are building the self-efficacy and planning skills needed to attain this goal as well as building a greater understanding of the relationship between their time in education and their time beyond it.

## **Opportunity: other future considerations**

Which populations may Work Integration Learning in Schools programmes work with/target?

**Why focus on NEETs?**

NEETs are young people aged between 16-24 who are not actively engaged in or looking for employment, education, or training. While it is common for many young people to spend some time not in employment, education, or training in these years, NEETs are those who spend an extended and unstructured out of employment, education, or training.

- Young people who experience an extended period as NEET have employment scarring effects, leading to reduced hours worked, pay earned, and labour market participation compared to those who were not NEET. These employment-scarring effects can last long into the future, leading to enduring inequalities between those who were and those who were not NEETs.
- Being a NEET is also detrimental to long-term physical and mental well-being. Having worse employment outcomes is linked to poorer financial, health, and social outcomes – for NEETs, who often face a range of vulnerabilities contributing to their NEET status, these disparities can reinforce and reproduce cycles of poverty, inequality, exclusion, and marginalisation.

The term NEET has flooded recent literature, regularly in connection to concepts like ‘risk’, ‘vulnerability’, ‘deviance’, and ‘disengagement’. And indeed, NEETs do have increased risk profiles across domains of their lives, facing multiple, intersectional barriers, such as ethnicity, socioeconomic status, parental education, etc. For example:

- Although only 4% of the population have been involved with the justice system at the age of 15, of those who have, 58% go on to spend a significant amount of time in limited employment.
- Although only 6% of the population have been involved with the mental health system at age 15, of those who have, 41% go on to spend a significant amount of time in limited employment.

Despite a prominent language of deficit and risk, a growing number of authors are arguing for a strengths-based framing of NEETs and to see them for the individuals and aspirations that they are, and the opportunities that they bring.

**Through a strengths-based lens, we can see these young people not as problems to be fixed, but as aspiring and hopeful individuals who are both seeking opportunities and who present opportunities for our industries and economy.**

**Opportunity youth**

Opportunity youth is a term that resituates NEETs as opportunities, to be encouraged and invested in, rather than as problems to be fixed.

“As many as 85% of these youth report that it is extremely or quite important to obtain a good job or career (Bridgeland & Milano, 2012). As such, Bridgeland and Mason-Elder (2012) have characterized these youth as “opportunity youth — both because they are seeking opportunity and they present an opportunity to our nation if we invest in them” (p. 5). Although many of these opportunity youth have expressed the desire to obtain employment, due to a range of systemic issues including racism and the intersectionality of race, gender identity, and economics (e.g., Crenshaw, 2013) — many of these youth experience complex issues such as homelessness, mental health challenges, and health and educational disparities that make it hard to secure employment or launch a career.” – Boat et al 2021: 1



# Who are New Zealand's NEETs?

## Prior life experiences most associated with spending all or most years in limited employment at ages 16 to 24

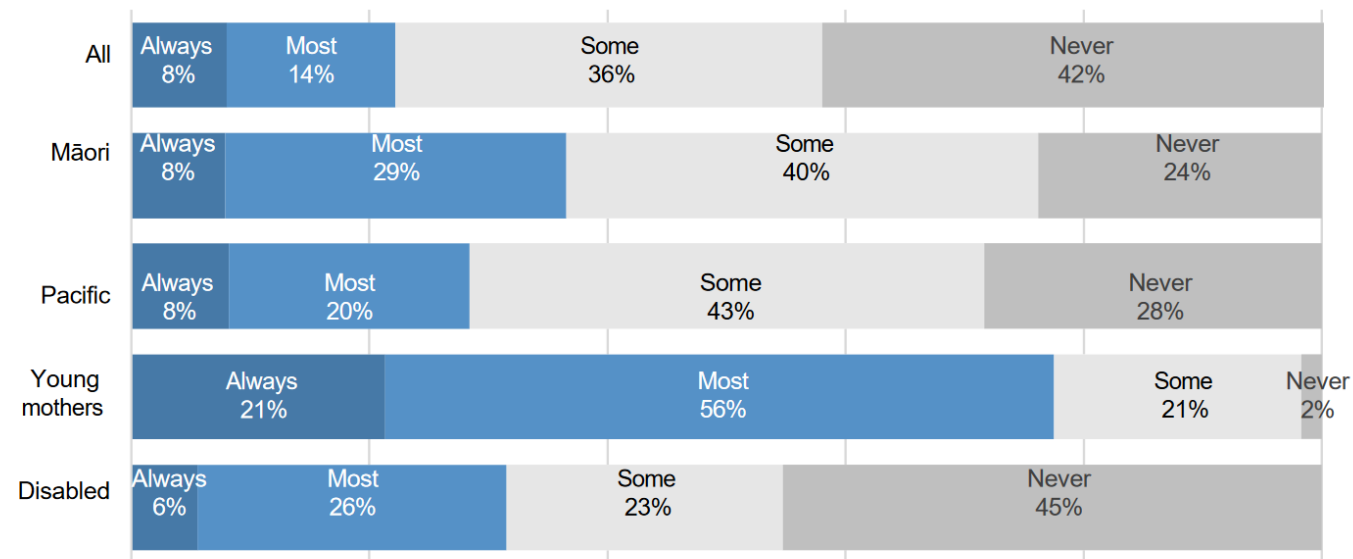
Young people who have spent more than half their lives aged 16 to 24 in limited employment are much more likely to:

1. have been a mother prior to age 19
2. have left school with no school qualification or NCEA Level 1 only
3. have no driver's license by age 18
4. have been involved in the justice system by age 18
5. have used mental health services by age 18
6. have been the subject of a notification to Child Youth and Family / Oranga Tamariki as a child
7. have spent time in an alternative education setting (alternative education or an activity centre)
8. have lived in a socio-economically disadvantaged neighbourhood
9. have parents with no or low qualifications
10. have been a dependent child of a beneficiary for more than half of their life to age 15
11. have been stood down, suspended or excluded from school, or referred to a school attendance service
12. have lived in social housing by age 18
13. have been the child of a teen mother
14. have had at least one unstructured school move (i.e., beyond primary to intermediate or to secondary)

Factors are listed in descending order from highest to lowest odds of spending more than half their years in limited employment at ages 16 to 24.

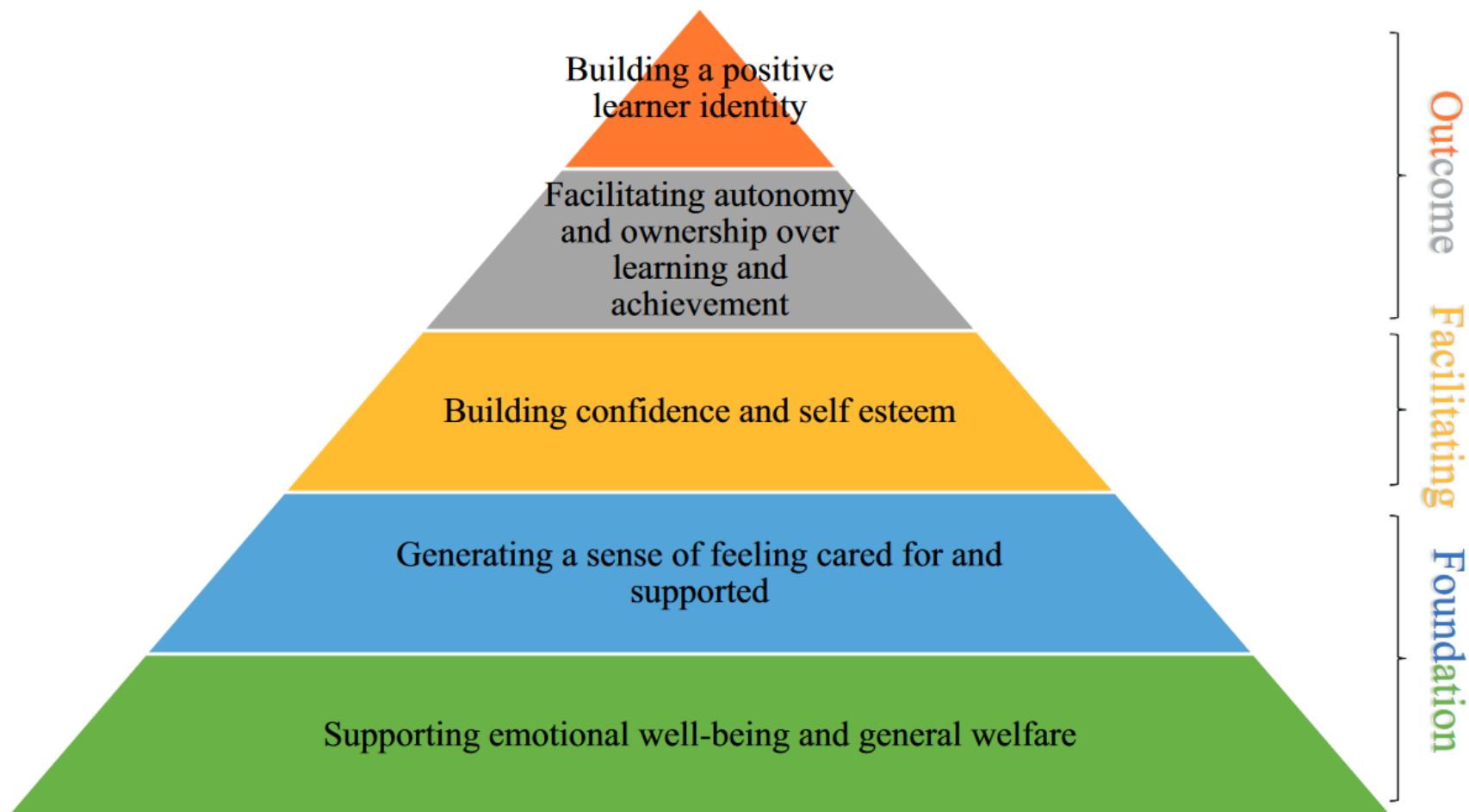
New Zealand Government 2023: 16

Figure A: Experiences of limited employment at ages 16 to 24 for different population groups



Notes: Results relate to people who were born in 1994 and lived in New Zealand for more than 330 days a year, at ages 16 to 24<sup>11</sup>

New Zealand Government 2023: 19



**Figure 1.** Five mechanisms to tackle the risk of becoming or remaining NEET.

### *What is a life course approach?*

We do not care about NEETs just because they are economically unproductive – we care about NEETs as this status indicates a dysfunction in the life of the young person – whether this dysfunction is within the family, the self, their identity, or their social position – and this negatively impacts their wellbeing.

A life course approach is one that does not just turn its attention towards the at-risk NEET as a fully-formed ‘risk profile’, nor does it look at the ‘risk profile’ in isolation of the individual and their experiences. A life course approach is thus multipronged:

- Firstly, it focuses interventions and supports at all parts of the life journey, putting in place preventative interventions, starting all the way at maternal health and well-being and moving through the education system, rather than just relying on reactive interventions.
- Second, when engaging with an individual who is NEET or at risk of becoming NEET, it should always be front of mind that the young person is not just a ‘risk profile’ but is an individual with a complex and unique history, with their own strengths and aspirations.
- Finally, a life course approach seeks to equip young people with the skills and resources that they need to thrive in the future. A life course approach is concerned with well-being along all points of the journey, and all interventions are designed to be cognizant of a young person’s past, present and future.

### *What does a life course approach look like?*

While there should, of course, be interventions targeting students who are already in the process of, or at risk of, disengaging from their education, this should be coupled with interventions that take a **life course approach** and take into consideration how negative events and associations build up over time to create these risk profiles.

- The education system and the school ecosystem should be better equipped to identify and manage risk factors early. This might look like dedicating more resources to mental health and social services support to reach students who need it or providing more thorough teacher training to identify the early signs/symptoms of disengagement and where to point them to get the help they need.
- Interventions should target the holistic well-being of young people, acknowledging that their ability to thrive is interwoven with multiple, interlocking domains of life, including familial well-being, spiritual and cultural connection, economic and housing security, and so on.

"The accumulation of labour market exclusion has a powerful impact on life chances, particularly for vulnerable youth who are likely to have experienced other forms of marginalisation and have limited access to the social and cultural capital that facilitates transitions into the workforce – Sanders et al 2020: 10



## Impact

What positive long- term  
changes in peoples' lives  
does this help to create?

&



## Effectiveness

How effective do we  
expect it to be at  
creating those changes?

## **Research Summary**

State of the literature

Intervention logic

Inputs of effective programmes

Activities of effective programmes

Outputs of effective programmes

 **Academic interest in successful transitions from adolescence to adulthood has increased in the past decade or so.**

- In part, this increased interest is a response to the 2008 Global Financial Crisis and the long-term scarring effects on youth employment rates and sustainability, both at home in Aotearoa and across the globe.
- However, it is also a response to broader trends that have been occurring for decades now, relating to economic inequalities, urbanisation and rural decline, shifting employment patterns (increased casualisation of labour, decline in manufacturing and factory jobs, etc.), and so on.
- This body of literature studies a broad range of interventions and programmes (work experience, soft-skill building, practical skill building, building learner identities, etc.)

 **Broadly speaking, the literature is dominated by conversations about NEETs or at-risk of becoming NEETs.**

- Most academic interest is directed towards those who have not successfully transitioned into further education, employment, or training (NEETs). There is a considerable body of evidence exploring who NEETs are and how to re-engage them.
- While the term NEET remains ubiquitous, scholars are starting to push for a more strengths-based or nuanced language ('opportunity youth', 'youth at-risk of limited employment', etc.).
- Given that NEETs are between the ages of 16-24, some of the evidence cited here also pertains to this age range.





**The literature on Work Integrated Learning programmes is dominated by interventions that take place in tertiary settings rather than secondary.**

- Tertiary students are expected to transition from their education/training into employment, whereas secondary students may transition into a range of further educational and training positions in addition to employment. Therefore, WIL programmes are commonly found in and studied in the context of tertiary education programmes.
- As with NEETs, the weight of tertiary studies can be felt to a degree in this summary, as we have drawn on some studies that examine a tertiary student populations' experiences.



**Apart from P-TECH, all the programmes in this broader portfolio of work are unique and have no direct analogue in the literature.**

- It is important to keep in mind that while some generalisations can be made, each programme has its own goals, target population, intentions, local communities, etc. They each seek to achieve a unique set of outcomes with the resources that they have available.

# Intervention Logic

# Impact & Effectiveness

## Inputs

## Activities Description

## Outputs Description

## Outcomes Description

## Good Measure Outcomes

### **Pedagogy:**

Targeted curriculum and tailored pedagogy with clear programme goals and outcomes

### **Mentors:**

Role models and mentors (formal or informal) to support both practical skill development and socioemotional development of students

### **Community and industry partnerships:**

Integrated network of community and industry partnerships to provide unique learning opportunities, support local economies, and support resource sustainability of the programme

### **Strengths-based careers education**

Students receive exposure to and education regarding a range of diverse careers, including how these career paths link to education/training pathways

### **Tailored transition support**

Students have access to education and guidance navigating their transition out of secondary schooling, from behavioural support, to practical education, and emotional guidance

### **Authentic learning experiences**

Students have the opportunity to practice what they are learning in the classroom out in the field, allowing them the chance for exploration and testing

### **Skills: practical skills/qualifications and soft-skills**

Students gain a range of skillsets and qualifications relevant to their field and more broadly applicable across settings/fields

### **Identity and belonging**

Students connect to a community, which creates a sense of belonging whilst becoming a part of the students identity

### **Autonomy, empowerment and dignity**

By being treated with dignity and with unique learning styles acknowledged, students are empowered to drive their own autonomous learning and education

Improved future readiness

Improved holistic wellbeing

Increased confidence and self-esteem

Increased education engagement

Increased self-efficacy

Increased social capital

Increased resilience

Reduced disengagement

Reduced deviance

Improve mental health

Increase academic achievement

Increase employment

Increase drivers' licensing

Increase specialised skills

Increase STEM achievement

Reduce addiction

Reduce emergency benefit

Reduce offending

Reduce risky behaviour

Inputs

Activities

Outputs

Outcomes

Measurable outcomes



What are the ingredients of effective  
Work Integrated Learning programmes?

## **Input**

- Targeted curriculum and tailored pedagogy
- Role models and mentors
- Integrated community and industry partnerships

# Targeted curriculum and tailored pedagogy

**Work Integrated Learning programmes serve diverse communities and student populations. This diversity should be reflected in programme design and delivery, with the curriculum and pedagogy structured to meet the goals of the programme and the needs of the students.**

Often, there is a fair amount of flexibility in how Work Integrated learning programmes are delivered – the diversity of possible activities within these programmes, in addition to the high degree of influence that students can usually direct over their learnings, mean that the curriculum is always evolving. However, they always centre on a disciplinary space and a goal and use education to forward that goal.

Students thrive when the curriculum and pedagogy are:

- Strengths-based, focused on identifying and building upon the individual abilities and experience of students, while looking for areas to hone their skills further
- Intellectually challenging and engaging
- Designed to meet the needs of the students whilst also providing an educational experience that allows students to flex their skills, build new ones, and discover passions/interests
- Integrate theoretical learnings with real-world practice, whether in the field, the lab, or the site.

Programmes with targeted curriculum and tailored pedagogy will be able to answer:

- Who (what students) are you are reaching?
- What foundational skills and learnings will they be leaving the programme with?
- How will programme design and delivery impart these skills and learnings on students?

**The curriculums and pedagogies across the portfolio all draw on their disciplines/industries to provoke student learnings in different ways**

School	Curriculum and pedagogy
Aquaculture Academy	Aquaculture education used as a conduit to promote soft-skill development and personal development
Primary Industry Academy	Primary industry education used as a conduit to build employability skills, grit, and community-mindedness in students, and to re-engage in education
P-TECH	Technology education in conjunction with a range of industry opportunities used to provide students a pathway to technology careers and to increase representation of women, Māori and Pacific
Ringa Raupā	Construction used as a conduit to retain student engagement with learning and build grit, confidence, maturity, etc.

# Integrated community and industry partnerships

**Community and industry partnerships** are the lifeblood of many WIL programmes. They **significantly increase the learning and work experience opportunities available to students, foster important connections between students and local economies, and provide essential resourcing and financing sustainability to schools**, who are often overburdened.

- A primary purpose of community and industry partnerships is to connect students to work experiences, knowledge, and places. These partnerships give students insight into the diversity of available careers within an industry, whilst allowing them to explore many of these paths first-hand. This has several benefits to student engagement, allowing them to put skills into practice, by building a closer affinity between industries and students, and building pride in and connection to local industries and economies.
- In addition to the benefits to the student, community and industry partnerships are also beneficial to those communities and industries that do the partnering, and to local economies in whole. This effect is felt particularly strongly in rural areas. The theme of promoting positive narratives about employment and career advancement opportunities in rural areas was prominent across the literature as a means of supporting local economies and maintaining community wellbeing.
- Finally, community and industry partnerships often provide crucial resourcing to schools to support the sustainability of programme delivery. Many WIL programmes are resource intensive and require specialised equipment, and these partnerships can help schools to obtain these resources where they might otherwise struggle.

**Each school draws on a unique ecosystem of industry and community partners to support student learnings and opportunities.**

School	Community or industry partnership
Aquaculture Academy	A blend of formal and semi-formal arrangements with local aquaculture industries, e.g., King Salmon, Marlborough Port, Schwass Family Trust, etc.
Primary Industry Academy	Informal relationships with local farmers, local community through volunteering, participation in events and competitions, etc.
P-TECH	Formal industry partners (The Warehouse, IBM, etc.), formal partnership with MIT
Ringa Raupā	Formal partnership with iwi and with subcontractors who work the site

# Role models and mentors

**Role models and mentors are foundational to the transition success of young people, providing them with both practical advice and education as well as supporting psychosocial and emotional development.** While young people often find role models and mentors in their whānau and community, **teachers and other adults in education spaces are in a prime position to exert a positive influence on students.**

- Regarding informal mentorship provided by teachers or others in educator roles, the emotional labour conducted in this space is often identified as a pivotal component of student success. This goes for both "high achievers" and "low achievers", but for "low achievers", teachers and educators can hold a particularly important role as one of the potential few people who believe in the student and who can provide them with tangible support.
- Formal mentorship can help to drive the development of confidence, self-efficacy, identity salience, and sense of belonging in a student. Often, formal mentorship will exist to serve a purpose and the relationship will be structured around that purpose – such as transition support or obtaining university entrance – however support regularly also extends to general support with wellbeing and development.
- Both formal and informal mentoring relationships can help to teach students the unspoken 'rules' of an industry or of education/employment spaces in general, introducing students to both the theoretical and tacit worlds of their industry.

**Role models and mentors come in many different shapes and forms. Each programme provides students with different degrees of mentoring depending on participant profiles and programme goals**

School	Role model/mentor
Aquaculture Academy	Informal student-teacher relationship, casual
Primary Industry Academy	Informal student-teacher relationship, intentional
P-TECH	Formal industry partner mentor
Ringa Raupā	Informal student-teacher relationship + other site staff, intentional

## Role models and mentors

**Mentoring is a key component of the P-TECH model.** All P-TECH industry partners provide mentors to participating schools. Mentors may come from anywhere in the company [they do not need to be specifically working in a technology role] and will provide group mentoring to a cohort of students. In addition to giving students practical advice and emotional guidance to support their transition to tertiary education, these mentors are also a part of the broader mission to increase minority representation and diversity in New Zealand's tech sector.

Formal mentoring has been found to improve academic engagement, attainment, and achievement – particularly for students who are underrepresented in a field, such as ethnic minorities in STEM.

In their study of hierarchical mentoring as a strategy for improving diversity and retention in undergraduate STEM disciplines, **Wilson et al 2011** find:

“... the strategies employed through **the LSU-HHMI [Louisiana State University – Howard Hughes Medical Institute] Mentoring Model** collectively lead toward **greater retention and STEM graduation** rates for all participants, but **particularly those from underrepresented groups.**” p.5.

Mechanisms of change:

“1. *Realization...* that what they are currently doing is not working; this may be poor time management (particularly wrong or inconsistent choices), learning strategies that they employ which most likely are low on Bloom's Taxonomy and learned habits from high school that perpetuate academic decline. Inattention to courses in which they have little interest, not understanding or committing to the truth that mastery takes 'work,' etc.

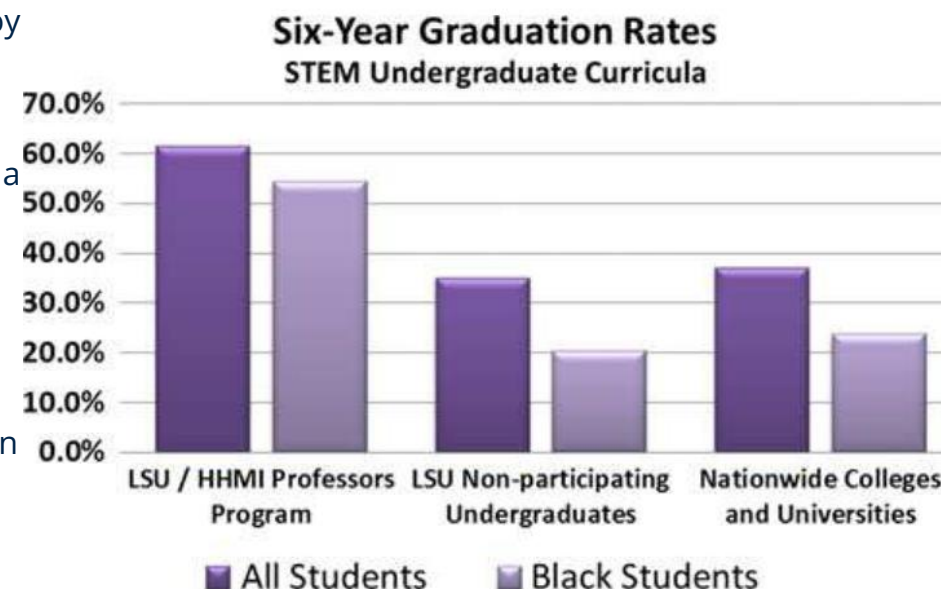
2. An *honest commitment* to systematically identify exactly what is not working; this comes as a result of academic advisement during mentoring meetings and following up on all “intervention” assignments, honestly communicating with the program staff about their current academic status and progress, learning from interactions and insights from faculty research mentors, staff, other professional/academic support mentors, and program peers, taking their individual development plan seriously.

3. *Changes in mindset* about their ability to learn the “hard” subject matter, particularly for under-represented students in comparison to majority students; stepping outside of isolation (perceived or real) as a 'minority' student and not allowing that to hinder them academically.

4. *Committing to work through* the plan of action.

5. *Following through on their commitment* which prevents them from relapsing into old academically destructive habits and ways of thinking.

6. *Continuous improvement* which develops sustained personal pride and *great satisfaction in the outcome* which propels them to maintain what they have obtained.” – p. 6.





## **Activities**

What should Work Integrated Learning programmes do with these ingredients?

- Strengths-based careers education
- Tailored transition support
- Authentic learning experiences

# Strengths-based careers education

**Effective strengths-based careers education gives students a comprehensive understanding of what future careers are available to them and a roadmap to achieving this career.** Strengths-based careers education can take many different forms (formal mentoring, informal advice, careers advisor, events like careers fairs or industry-relevant events, etc.), but whatever the form, these supports should take into consideration the interests and goals of the students, while targeting their growth areas and skill development.

- Strengths-based education is the foundation upon which the successful transition lays. Strengths-based education involves a range of activities designed to expose students to a variety of careers and provide guidance on what will be required to achieve these goals.
- Strengths-based careers education is important to enable young people to learn about their options and the diversity of careers, and then put in a plan to reach this. Crucially, good careers education must be clear about what the impacts of education and other choices are, and what educational, training, and employment options are available to them, to ensure that young people have agency in their career decisions.
- Some authors have drawn upon Bourdieu's theories of social capital and habitus to explore how differences in socioeconomic status may impact on careers education and careers knowledge. Low socioeconomic and other disadvantaged students regularly rely on informal sources of information for their career's advice - while this does present these young people with some opportunities, they may miss better opportunities due to a lack of knowledge or experience. Furthermore, as young people miss opportunities, they miss out on essential professional and social development that may further disadvantage a student compared to their peers. Effective strengths-based careers education should remedy these disparities in social capital by giving disadvantaged students the capital they need to meet more advantaged students.

**Strengths-based careers education can help to expose and inform students of the diversity of careers available within a given industry**

School	Careers education
Aquaculture Academy	Careers education through careers fair, kaimoana day, etc., as well as informal exposure to workplaces
Primary Industry Academy	Significant careers education provided to students in-class, based on individual bespoke needs, informal exposure to workplaces, and invited guest speakers
P-TECH	Significant formal career education through industry skill mapping, mentoring, workplace visits, etc.
Ringa Raupā	Informal careers education woven throughout programme, based on individual bespoke needs

# Tailored transition support

**Transition support is the next step beyond careers education and involves equipping students with the skills to not only survive but thrive in their post-secondary environment.** Tailored guidance that gives students bespoke support to build their transition readiness can be critical for many students, particularly those underrepresented in their chosen field, to build the skills and knowledge to navigate their future prospects.

- Providing students with tailored transition support means giving them the tools, resources, and skills required to move from one setting and phase of life to the next. This is both more immediate in nature than careers education and more nebulous in its breadth. Moreover, while careers education is intrinsically tied to particular fields and industries, transition support can be tied to specific fields/industries, or it can provide students with a broader set of generic skills and resource that will support them wherever they are, like soft skills and transferrable skills.
- Tailored transition support might look like: interview coaching or job search advice, soft skill building (communication, collaboration, etc.), work survival skills (negotiating with employers, knowing your rights, where to turn when challenges arise), exposure to and education in places of employment or further education/training, etc.
- Tailored transition support is particularly important for students who may not be engaging with their education or who have not had many opportunities to build up a strong set of behavioural, self-regulatory, and communicative skills to meet the expectations of these spaces.

**Tailored transition support ensures that students leave their secondary education with the confidence and knowledge to succeed in their new environment**

School	Transition support
Aquaculture Academy	Limited – while some bespoke support may be provided, providing transition support is not an explicit goal of this programme
Primary Industry Academy	Considerable bespoke support provided by teachers, e.g., interview coaching, ‘working life skills’ support, keep in touch after employment gained, etc.
P-TECH	Formal support provided by mentors, transition coordinators, etc. Dual enrolment programme component intended to improve transition experience for students
Ringa Raupā	Considerable bespoke support provided by teachers, with programme intended to improve a broad range of skills to support transition to further education/employment

# Tailored transition support

Case example:  
Primary Industry Academy

Students at **Geraldine High School's Primary Industry Academy** receive considerable transition support, provided on both a **formal basis** and on a **bespoke and individualised basis**.

**Transition support is baked into the Primary Industry Academy through formal programme components** like: the application and acceptance process (which involves completing application forms, conducting interviews, negotiating expectations); work experience and the supplementary training sessions (addressing topics such as how to talk to your employer, appropriate workplace behaviour, negotiating conditions and benefits); and in-class lessons on surviving the workforce (how to read and apply for jobs, looking after your mental and physical health, what to look out for when applying for a job).

In addition, the Primary Industry Academy teachers provide students with **bespoke individualized advice and support when requested**. This may include practical support around CV writing or interview coaching, or it might include informal emotional support provided by keeping in touch with students for the first few months of their employment to track how they are doing. Students are thus supported throughout their transitional journey.

This tailored transition support **prepares students for the practical aspects of job searching**:

"The reporting of this indicator was subdivided into activities related to 'applying for jobs' and those related to 'interviewing for a job'. **Activities that develop skills related with applying for jobs are associated with positive adult employment outcomes** in three of the four datasets with available data: Australia, Canada and United Kingdom (BCS70). Activities that develop skills related to interviewing for jobs are associated with positive adult employment outcomes in the two datasets with available data: Canada and United Kingdom (BCS70). These results confirm that there is evidence from three countries that support **application and interview skills development activities as an indicator of career readiness.**" – Covacevich et al 2021: 68

Supports students to develop and improve their self-regulation:

"Self-regulation theories propose that individuals go through a goal setting, goal pursuit, and goal monitoring and evaluation phase in which they self-regulate their thoughts, feelings, and behaviors to attain their personal goals (e.g., Vohs & Baumeister, 2016; Zimmerman, 2000). These ideas can be applied to the school-to-work transition process, where goal setting and formulation would mainly take place when preparing for the transition, goal pursuit during the transition, and goal evaluation and monitoring during initial labor market integration... Specifically, **self-regulation entails cognitive (e.g., cognitive skills, career attitudes), motivational (e.g., job search intentions, career aspirations), affective (e.g., stress, career satisfaction), and behavioral (e.g., job search behavior, career self-management) factors that could play a role in each transition phase.**" Blokker et al 2023 p:

252

And supports students to grow and develop their social capital:

"... in order to enact one's aspiration, **an individual needs to draw upon knowledge, skills, networks and resources to successfully manoeuvre between complex educational institutions and vocational structures** (Smith, 2011). Navigating this process requires a specific understanding of the ways in which large institutions and pathways into and through education and work operate. **Often, students from low SES backgrounds have not experienced or been exposed to these understandings in order to successfully direct themselves through this journey** (Irving, 2009). Formation of aspirations are also shaped by socioeconomic background. Although research has shown that students from low SES backgrounds have similar career aspirations to those from higher SES backgrounds (Gore et al., 2017), Smith (2011, p. 166) argues that those aspirations can be more 'brittle' as a result of having fewer concrete experiences, opportunities and resources to draw on when navigating pathways... In these ways, education and employment outcomes for students from low SES backgrounds are shaped by their and their families' experiences, as well as the resources available to them." – Groves et al 2023: 523

Central to interventions aimed at increasing the career-readiness of students is opportunities for authentic learning experiences. There is strong evidence that **by linking a students' learning experiences to real-world experiences, industries, knowledge, and potential career paths, students not only learn more effectively, but they also build their self-efficacy and confidence to a greater degree.**

- In some cases, authentic learning experiences can be driven by providing students with work experience and job shadowing/work visitation opportunities, allowing them to spend some time in the workplace and participate in their routines and practices. This has the benefit of providing students with some exposure to a workplace, including the expectations and responsibilities that are different to school, and the diversity of career options and possibilities.
- In other cases, students can gain authentic learning experiences in the course design and activities. While this does not connect the learnings to a workplace in the same way, this does connect learnings to real-world settings and may allow for a more interactive, experimental, and engaging experience overall as there is more freedom allowed in course design.
- Whatever the method, literature consistently drives home the point that students learn best when they are able to create real-world connections with the content they are learning, and when they are given the opportunity to put learnings into practice to experience them, building their tacit knowledge. Often, hands-on learning is also simply a more enjoyable experience than classroom learning and can help to engage students through novelty and excitement. Authentic learning experiences also give students the opportunity to realise that perhaps they actually don't enjoy an activity as much as they thought, and can contribute to the overall pursuit of a career path.

**Authentic learning experiences allow students to learn by doing, which is one of the most effective ways to connect students to course material**

School	Authentic learning experiences
Aquaculture Academy	Embedded in curriculum: hands-on practical work on barge, with local industry partners, or in the wet lab
Primary Industry Academy	Majority of curriculum takes place outside or on farms, plus formal work experience component in L2
P-TECH	Opportunities for paid internships and workplace visits embedded in programme
Ringa Raupā	Entire programme based on hands-on work

## Outputs

What should Work Integrated Learning programmes equip young people with?

- Skills: practical skills/qualifications and soft skills
- Identity and belonging
- Autonomy, empowerment and dignity

# Skills: practical skills/qualifications and soft skills

One of the most tangible and easily-measured outputs of WIL programmes is the qualifications, the practical skillsets, and the soft-skills that students build, equipping them with a range of tools to enter their field with confidence and a head start.

- Providing students with formal qualifications and practical skills gives them a head start in their career journeys. By gaining qualifications and practical skills in secondary education, students have the opportunity to bridge theory and practice as they explore their career options and begin to give shape to their own interests and career journey. As students build their knowledge, allowing them to gain industry-recognised qualifications at the same time gives students something tangible that they can bring with them on their next step.
- For students who are at-risk of becoming NEET, these practical skills and soft skills can help to drive a positive learner identity, as these skills are often more tangible and immediately-realizable to students, meaning that they can see and track their growth more clearly and build a sense of pride in their work. This may then mean that school is a more positive experience for students, and they begin to dream and envision their futures.
- The terms ‘soft-skills’ and ‘non-cognitive skills’ encompass a broad range of skillsets that relate to an individual’s ability to manage themselves and engage successfully with others. This includes skills like motivation, perseverance, responsibility, teamwork, communication, diplomacy, emotional management, and grit. **These skills can indicate a degree of maturity in a young person and can support their social, emotional, and psychological wellbeing through their transition to further study or employment.**

Each school in the portfolio provides students with a blend of formal qualifications, industry-relevant training, and soft-skills training

School	Qualifications
Aquaculture Academy	<b>Aquaculture qualifications:</b> boating, diving, first aid, etc. <b>Soft skills:</b> teamwork, collaboration, responsibility, etc.
Primary Industry Academy	<b>Primary Industry relevant qualifications:</b> quad bike and farm bike license, first aid, etc. <b>Soft skills:</b> confidence, self-esteem, communication, collaboration, etc.
P-TECH	<b>Tertiary certificates,</b> up to level 6 diploma <b>Soft skills:</b> self-management, communication and self-presentation, etc.
Ringa Raupā	<b>BCITO</b> standard pre-apprenticeship qualification <b>Soft skills:</b> Self-management and self-regulation, confidence and self-esteem, etc.



## Skills: practical skills/qualifications and soft skills

Education is just as much about socialising students and supporting them to develop good self-management techniques as it is about teaching the facts and the theories of disciplines. While the entire school journey is intended to instil these skills in students to a certain extent, WIL programmes can be a key space for students to learn both practical skills and soft skills whilst building a suite of industry-relevant qualifications.

Teaching practical skills and soft skills is a core goal of **Queen Charlotte's Aquaculture Academy**. By giving students collaborative exercises in real-world environments, Aquaculture Academy students build teamwork skills – communication, conflict resolution, the sharing of ideas and space, etc. – and self-management skills – responsibility, accountability, organisation, etc.

**Guerra-Báez 2019** finds that these skills are best taught when students have opportunities to practice in real-world settings/contexts outside the traditional classroom:

“... strategies to promote soft skills include workshops or group training programs aimed at promoting collaboration and teamwork as well as activities that promote communication between students such as **games and artistic or recreational activities outside the traditional classroom space**... this is not often done in schools and that it is as yet necessary to clearly establish strategies and activities in the curricula specifically aimed at training in transversal skills. Similarly, **training in soft skills requires fieldwork with communities and families close to the educational environment that can benefit from the technical or disciplinary skills that the students develop**. This allows them to generate a solid sense of identity, evidencing **the need for teamwork in order to obtain better results** in their daily work and personal activities.” - p. 6

Importantly, however, soft skills and non-cognitive skills are not enough in isolation to overcome systemic or individual barriers facing many young people.

In a large systematic review and meta-analysis on employment programmes for youth, **Kluve et al 2016** finds that soft-skills and non-cognitive skills training are less effective than other intervention types and should be given in conjunction with other types of interventions/activities.

“Another important finding in terms of program design is that **training programs that focus on soft or non-cognitive skills may not be the silver bullet that many expected them to be**... The interpretation of the result is that, if programs are not set up to address the needs of beneficiaries through good profiling and follow-up systems, appropriate contracting and payments systems, and a diversified package of interventions, simply adding a soft skills training component is unlikely to make a difference. This may be due to a broad set of non-technical skills components that have been applied that have made it difficult to determine empirically which are the most likely to have positive impacts, and for which target group.” – p. 34

This demonstrates why programmes should endeavour to provide students with a range of skillsets that encompass both soft skills and practical skills. Queen Charlotte's Aquaculture Academy leaves students with a range of practical skills and qualifications, ranging from knot tying, diving certifications, first aid, boat licensing, etc. These skills all provide tangible and measurable indicators of capability that future employers can connect to student capability. Moreover, many of these practical skills and qualifications can be used across a range of related industries, from marine biology, to a mariner in the Navy.

# Identity and belonging

**Having a sense of identity and belonging to a field, school, industry, or discipline, can be a key driver of success and satisfaction.** Evidence suggests strong links between identity/belonging and improved performance (in both academics and employment) due to the field, school, industry, or discipline becoming a part of self-worth and self-concept. Therefore, connecting student identity to the school and the industry can support not only the academic engagement of students but also their overall development and psychosocial wellbeing.

- Students with higher rates of belonging to their school demonstrate improved psychosocial and emotional development and wellbeing. This includes higher levels of happiness, self-esteem, and self-identity. On the other hand, students who experience negative senses of belonging in adolescence were found to be more prone to risk-taking behaviours, like substance use and early sexualisation.
- For students who are disengaging or not connecting with their education, WIL programmes that foster a sense of identity and belonging can promote their re-engagement. Ultimately, if the goal is to build a positive learner identity, giving these students the confidence to explore different learner identities and pathways as a part of their current sense of self can support their re-engagement.

Students who belong to groups underrepresented in a field/discipline may face discrimination or ostracization, and therefore benefit even more from having a strong sense of identity and belonging with their field/discipline.

- There is a growing amount of literature addressing the links between identity salience and success in STEM fields amongst students traditionally underrepresented or marginalised in these fields, including ethnic minorities or women. Evidence suggests that the psychological process by which students begin to see a discipline as a part of their identities allows students to see themselves “as” a part of that discipline, leading to increased connection with and affinity to a discipline.

**Each programme and school targets belonging in a different way. For some, it is an intentional and active programme component; for others, it is an incidental flow-on effect**

School	Identity and belonging
Aquaculture Academy	Flow-on identity building through connections to local economies
Primary Industry Academy	Intentional flow-on identity building with local community and broader industries, encouraged by wide participation in local and national events or competitions
P-TECH	Intentional identity building at both the school level (identity spaces) and at the programme level (mentoring, promoting diverse representation in tech)
Ringā Raupā	Flow-on identity building through close work with team

# Autonomy, empowerment and dignity

Ultimately, students should be coming out of Work Integrated Learning programmes with an enhanced sense of autonomy, empowerment, and dignity. **Students should have been given the opportunity to learn about both themselves and the world in a context that is safe, with educators and mentors who are considerate of each student as an individual and their unique journeys.**

While the practical, educational and experiential components of building a students' future readiness are, of course, foundational to Work Integrated Learning programmes, underlying this is a need to build a student's autonomy to learn and drive their growth independently, empower students to reach their future prospects, and treat them with dignity and respect so that they have the confidence to realise these prospects.

- This means giving them the self-confidence to realise their own self-worth and abilities, balancing the required guidance with a healthy dose of independence and trust. It means giving them the knowledge and the skills to use the tools they receive throughout their learning journey to achieve their goals. Crucially, students should have control over their work and be trusted to complete it. By treating adolescents with the expectations of maturity and responsibility you would an adult, adolescents will grow into that role and have space to experiment with their own identity and independence.
- Supporting students to build autonomy, empowerment and dignity is a form of **contributive justice** that enables students to develop a sense of pride in learning and their learning outcomes. However, in achieving this, learning must be shown to have a purpose that is evident to students, it must have some connection beyond the world of the classroom, and it must be available equally to all who seek it.

**How a programme supports the growth of autonomy, empowerment and dignity in students can vary considerably, depending on programme goals and population**

School	Autonomy, empowerment and dignity
Aquaculture Academy	Flow-on effects of independent study, strong collaborative workspaces, etc.
Primary Industry Academy	Intentional development in these spaces provided through strong teacher support and exposing to diverse learning spaces
P-TECH	Intentional development in these spaces through the network of industry partners and the range of supports given at the level of P-TECH, Manurewa HS, MIT, etc.
Ringa Raupā	Intentional development in these spaces largely driven by student-teacher interactions

# Autonomy, empowerment and dignity

The teachers at **Ōpōtiki College's Ringa Raupā** programme know that their students are brimming with potential, but may not have had many opportunities to demonstrate, grow, or develop this potential. They may have disengaged from mainstream schooling and may be heading towards a pathway that involves substance abuse, gang involvement, and long-term unemployment.

Ringa Raupā's students are emblematic of the challenges facing NEETs - how multiple 'risk profiles' intersect with and interact with one another, and how the individuals behind these intertwining 'risk profiles' are at-risk of being washed away behind statistics and vulnerabilities.

"There are multiple reasons why some students disengage from mainstream schooling (Mosen-Lowe, Vidovich and Chapman 2009). These include a schooling rigidity that **does not recognise the complex lives led by many young people**; authoritarian structures within schools, and often, to these students, irrelevant and meaningless curricula and uncongenial pedagogical practices. This disengagement can have serious consequences for young people who already come from some of the most marginalised sectors of society (Savelsberg and Martin-Giles 2008)." – McGregor for Mills 2012: 2

However, through the Ringa Raupā programme students are empowered. By engaging in valuable labour that brings them pride and by being treated with respect and dignity, students are given the space to build their self-efficacy and their self-concept. The process of learning through doing, of having responsibilities and expectations within a group project, and needing to communicate, collaborate, and contribute to this project, builds the confidence and abilities of students, expanding their self-expectations and self-beliefs.

"It is our contention that contributive justice is present in a classroom when students are presented with learning opportunities that enable them to develop a sense of pride in the outcomes of that learning - in much the same way that a craftsperson feels pride in the construction of a product (Sennet, 2009)... What the data from our research indicate is that **such learning occurs when it is has a purpose (whether personal or instrumental) and that that purpose is evident to the student**. Julian (a teacher at Boronia Flexi School) linked this to 'a sense of empowerment for the young people to be who they feel as though they want to be'. **It also has some connection to the world beyond the classroom and stretches and challenges all young people, not just those deemed to be of 'high ability'.**" – Mills et al 2016: 20

Importantly, the autonomy, empowerment, and dignity of students are driven in this context by the relationships that develop between students and teachers. Ringa Raupā teachers and instructors treat their students with respect and trusts them to achieve their work without being micromanaged or overburdened. Work is divided equally and fairly amongst the students on site, and opportunities are always available for growth.

"Enabling young people to **develop a sense of ownership over their future pathways** (see Table 4) was a frequently mentioned outcome of successful interventions and a consequence of increasing confidence and trust in themselves and their supporting adults. Young peoples' comments highlighted the **increased educational aspirations that led on from an acquired self-belief in the ability to envisage educational and work pathways...** Meeting their needs and the educator's flexibility to personalize support (see, Table 4) enabled young people to conceptualize pathways that were relevant for them. Educators flagged the importance of a flexible (see Table 4) personalized approach in supporting autonomy and ownership" – Brown et al 2021: 467

## **Outcomes**

How can Work Integrated Learning programmes better understand and track student outcomes?

## Outcomes measurement



Most schools were apprehensive to use mainstream or traditional indicators to measure student success, instead, they stressed that the **primary outcome that needs to be of focus is the students' long-term post-secondary school pathways**. This is relevant to all students, but especially for those students who are participating in a Work Integrated Learning programme – these programmes require a more diverse and robust set of metrics to evidence its effectiveness.

The good news: most schools do have a strong appetite to understand the impact of their programme on students.

**The biggest barrier and opportunity is resourcing.** The reality is that there is currently no push for schools to collect data at the moment. However, abundantly clear that the schools would want to do this if they could.

MoE could support schools and programme leaders to track long-term outcomes. **Answer the key question: “where do our students go when they leave us?”**

- One element of this may be educating school and programme leaders about the data that schools already have access to and how it can be interpreted and used to track outcomes for the programmes/schools.

Outcomes





# NCEA L3 achievement



Generally speaking, **most programmes had higher NCEA L3 achievement than their school average.**

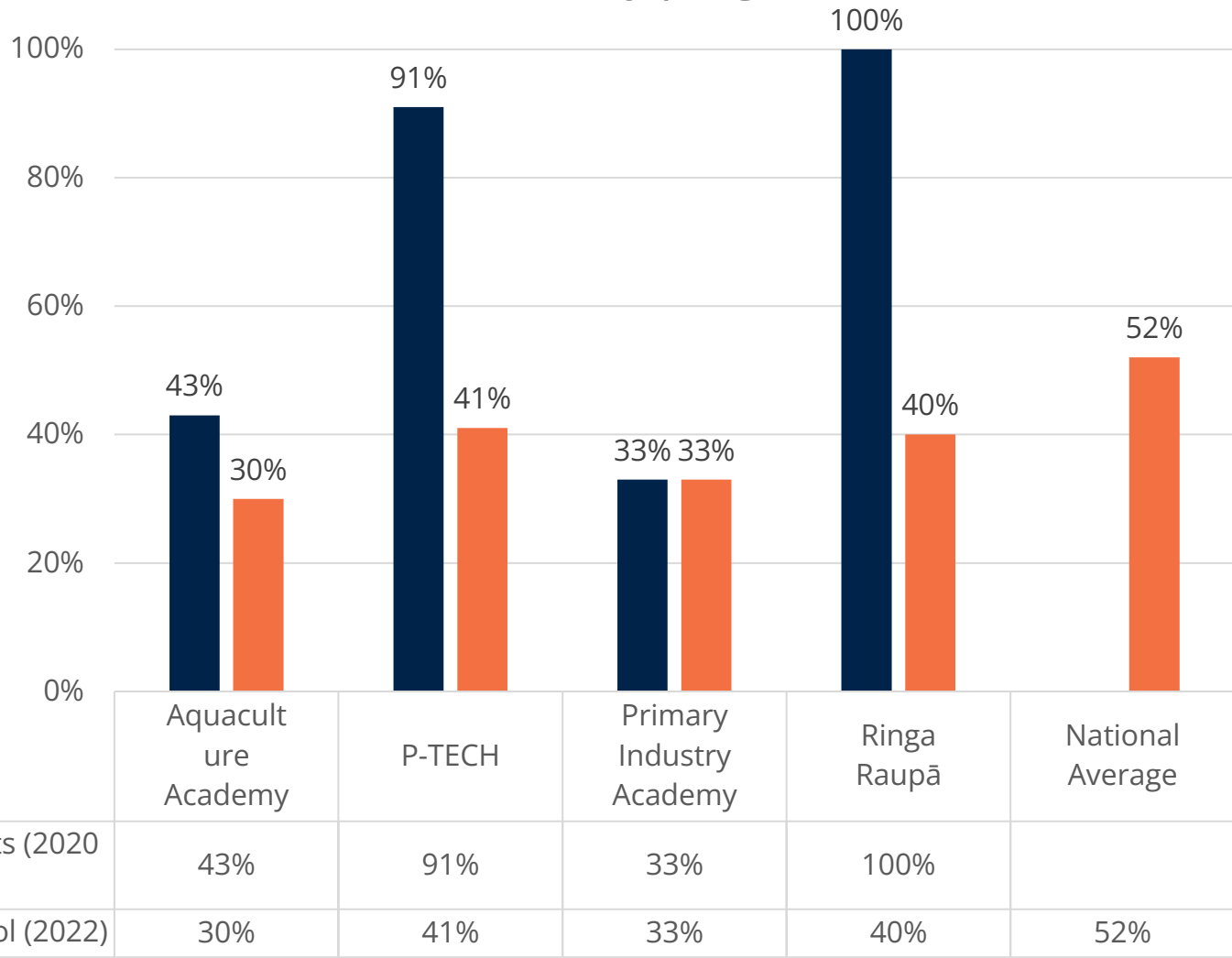
However, it is important to keep in mind that the structure of these programmes is incredibly different.



Ringa Raupā students do not participate in mainstream education at all – therefore, they achieve their NCEA L3 entirely through the programme. Ringa Raupā is able to make more accomodations and changes to the way students learn (e.g., only 40-60 mins of workbook/classroom learning a day). The caveat to this is that due to the nature of the programme, students are unable to achieve university entrance qualifications through Ringa Raupā (Students have the opportunity to take a school to university bridging course, if they wish to attend University in the future).

With all other programmes, students take it as an additional subject and still participate in mainstream education.

### NCEA L3 achievement by programme and school



# Post-programme path



With no dedicated funded resource to follow-up with students post-programme, most schools did not have a robust record of student outcomes long-term (3-4 years post-programme).



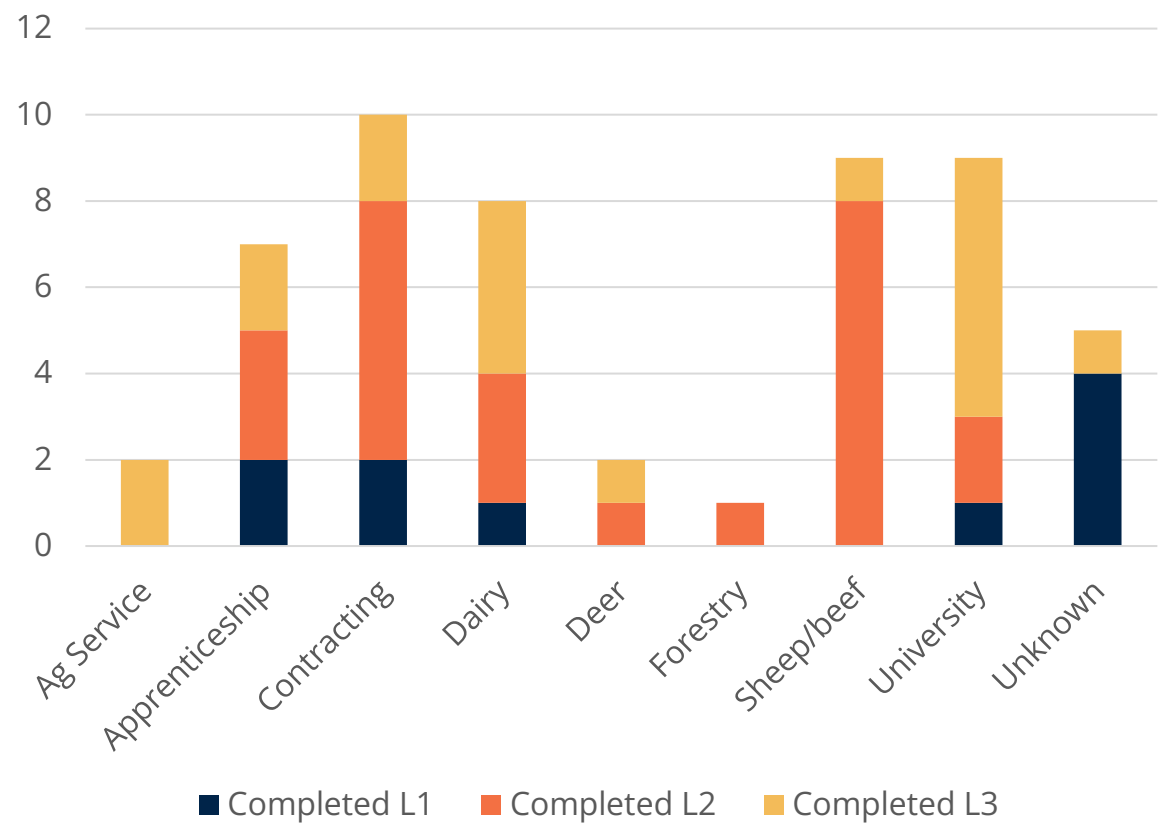
Smaller and/or regional schools sometimes have an advantage, as they tend to have more tacit knowledge of outcomes.



Geraldine's Primary Industry Academy was a good example of this. By virtue of being part of a smaller community, programme managers and coordinators have been informally and manually collecting data on student outcomes (e.g., word of mouth, bumping into them in the community).

However, this data is not standardised (not a specific point in time) and could be more robust.

Historical career data (2019-2022 cohorts)







**Future  
considerations**

Data Framework

Impact

What positive long-term changes in peoples' lives does this help to create?

Effectiveness

How effective do we expect it to be at creating those changes?

Opportunity

Who do you serve, and what is the opportunity to make a difference for those people?

Population

How many people do you reach, and how many engage long enough to meaningfully benefit?

Investment

What is the investment required to deliver the programme?

Questions to consider

What is the core aim of the programme (e.g., get students employment in a specific industry, increase NCEA L3 achievement, or create a university pathway)

Bonus: do you have a theory of change for how you create impact through the programme?

What metrics or data points do you have to tell the story of how impactful the programme is? This might include:

- NCEA achievement (compared to total school roll or national average)
- Tracking where students go after they finish the programme. (this might be immediate intentions and/or outcomes 3-5 years post programme)

Do you have basic demographic data (breakdown of ethnicity, age, and gender) of the students participating in the programme?

Do you know any other type of information about the students that you are working with? This might include any disability/ neurodivergence diagnoses, challenges with addiction, brushes with the law, etc.

How many students are engaging with the programme?

Were there any students who exited early from the programme? If so, why did they?

What are the costs to currently run the programme?

Are there any "hidden costs" (e.g., in-kind investments) that have not been accounted for in your costs? What is the true cost of the programme including any voluntary mahi by industry partners or in-kind donations?

## Network of schools



There is an opportunity for MoE to **create a network of schools** or to **act as a conduit to connect schools** to share information with each other.

This seems to be happening on an informal basis at the moment but hearing from someone on the ground who has successfully set-up and currently running a programme seems to be powerful.

Even on an ongoing basis, programmes could pool intelligence to share what has and hasn't worked.

Future considerations



# Appendix

- GoodFeatures
- Research summary
- References

**Mana enhancing**

- The programme adopts a strengths-based approach to education that focuses on a students' capabilities and abilities rather than their risks and vulnerabilities.
  - The programme fosters a growth mindset in students, which centres on the fundamental notion that ones' skills, abilities, and qualities can be cultivated through effort. This contrasts to a fixed mindset, which frames the skills, abilities, and qualities of students as innate, pre-determined, and set.
  - The programme encourages students to find and foster intrinsic motivations for success, or motivations that speak to their personal benefit (overcome a challenge, achieve growth and learnings, have fun, etc.) rather than focusing on extrinsic motivations for success (attain grades or praise, pass a course, etc.).
  - The programme trusts students to meet their responsibilities in the course and allows them to demonstrate their skills and abilities through their work. In doing so, the programme nurtures a sense of agency and ownership in the student over their work, facilitating a positive learner identity and self-confidence in work and educational goals.
  - The programme ensures that tasks of varying complexity and mundanity are equally distributed amongst the group, allowing each individual to build their skills, dignity, and have the opportunity to extend themselves and receive diverse learning experiences.
- 

**Experiential learning**

- The programme provides students with real-world opportunities for the authentic practice and refinement of skills in the focus industries. Authentic practice nurtures student interest in and connection to future employment prospects whilst promoting professionalism, self-management, multi-tasking, and teamwork skills.
  - The programmes' teachers play an active and engaged role in facilitating the experiential learning experiences of students by effectively planning field trips and other events, sharing their own interest and expertise, and facilitating reflections.
  - The programme's experiential learning components are structured around inquiry, ensuring that students are both orientated and on task while still giving them the freedom to explore the topic and their own interests.
-

**Holistic growth**

- The programme targets socioemotional and cognitive skill development to foster prosocial behaviours, such as cooperation, communication, sharing, helping, and expressing empathy.
  - The programme supports students to build their identity salience with both the industry/discipline in question and with the school. By building their identity salience, students have an enhanced educational experience and develop a deeper connection to the community, which nurtures self-efficacy and self-perceptions of ability.
  - The programme connects students to mentors or role models who support students to: develop successful learning strategies and identify areas of current action that 'aren't working'; shift their mindset regarding their abilities and capacity to learn 'hard' subject matter; commit to work through a plan of action; and develop sustained personal pride and satisfaction in themselves.
  - The programme's staff provide students with career advice that is personalised and attentive to their goals, desires, and skills. Staff spend one-on-one time with students to strengthen their trust and relationship, and tailor their support to the individual circumstances of students.
- 

**Connected communities**

- The programme's staff build relationships with local educators, trainers, and industries, and engage these networks collaboratively through student education. By engaging these networks, the programme may exert positive, context-rich knowledge on students and develop more targeted professional development opportunities.
  - The programme promotes a positive narrative regarding regional employment opportunities by making local industries and their opportunities visible, facilitating the exploration of jobs and careers within these industries, and educating students on local or online study/training opportunities.
  - The programme builds collaborative, multi-stakeholder partnerships between schools, vocational-education providers, universities, industries, and communities. These multi-stakeholder partnerships are deployed to increase career and education opportunities for students, increase their capital, and tailor education to reflect the diverse goals of individuals, industries, and the local region.
  - The programme incorporates work placement and work experience into the course. This allows students to develop their professionalism skills and gain a nuanced understanding of professional demeanour, ethical behaviour, and efficient working practices.
-

For many young women, the transition to further education or employment is hindered by caring responsibilities. Women continue to disproportionately shoulder the lions' share of caring work in families, whether caring for their own children – from babies through to adolescents -, or caring for siblings, parents, grandparents, cousins, etc.

“Young women (24%) are more likely than young men (20%) to spend more than half their years in limited employment between the ages of 16 and 24. This reflects much higher rates of limited employment among **young women who have a child before age 19**. Young mothers make up less than 2% of the total youth population, but 11% of the population who spend more than half their years in limited employment at ages 16 to 24... **77% of young mothers who have a child before age 19 are in limited employment for more than half their years aged 16 to 24**. More than half of young mothers are Māori while 20% are of Pacific peoples.” – New Zealand Government 2023:17

- In New Zealand, young women who have a child before the age of 19 are one of the highest risk groups for limited employment, with 77% of young mothers facing limited employment.
- When looking at broader family networks, women continue to take on a disproportionate amounts of caring, emotional, and domestic labour and are more often the ones to sacrifice employment or education opportunities due to these responsibilities.
- For young women who face limited employment between the years 16-24, the long-term scarring effects may be amplified and compounded as women become the de facto caregiver and thus limit their future potential earnings/career growth.

“Notably, women have experienced higher rates of unemployment and continue to have higher rates of underutilisation and underemployment. **Disadvantages experienced by young women will feed into this cycle of persistent poor labour market outcomes throughout their lifetimes and their whānau and following generation**. Early intervention will therefore be particularly valuable to improve labour market outcomes for women, particularly for Māori and Pacific women and young mothers.” – New Zealand Government 2023: 13

- Young rangatahi Māori and Pacific youth are also disproportionately represented in this group, in part due to the intersectionality of risk factors and vulnerabilities that they face.

### ***What do young women need?***

- **Flexibility:** young women, both with and without caring responsibilities, benefit from programmes that are flexible and accommodating. For women with caring responsibilities, flexibility gives young women the space to juggle competing responsibilities without feeling like their education has to be sacrificed for their family.
- **Inclusivity:** in some cases, the reason a programme does not serve many female participants might be because the culture of the industry is not welcoming to women and thus women feel excluded. Programmes should help create the culture shift needed for women to thrive by promoting open, inclusive, and equal spaces.



The inequities in education and employment for New Zealand's rangatahi Māori and Pacific youth are intrinsically linked with intergenerational exclusion and disadvantage. Māori and Pacific face the greatest hurdles across a range of social and financial domains – the high rates of limited employment for rangatahi Māori and Pacific youth are both a symptom and a reflection of these ongoing inequalities.

- In New Zealand, rangatahi Māori and Pacific youth are the ethnicities with the highest rates of youth in limited employment between the ages of 16-24, with 37% of rangatahi Māori and 28% of Pacific youth (22% of total population).
- Because of the multiple, intersecting complexities that many rangatahi Māori and Pacific youth face, there may be some large hurdles for individuals within this population to overcome.
- Rangatahi Māori and Pacific youth often experience exposure to racism throughout their interactions with public institutions and services, from education and employment services, to services like welfare and criminal justice.

“Rangatahi Māori and Pacific young people report that **exposure to racism and discrimination are common experiences across our education, welfare, and employment systems**. These experiences are reflected in young people’s education and employment outcomes, with experiences of limited employment varying significantly by population group... These disparities in employment outcomes can continue across working lives, with significant social, cultural, health and economic impacts on individuals, and on iwi, hapū and whānau, spanning generations.” – New Zealand Government 2023:17

### ***What do rangatahi Māori and Pacific youth need?***

- **Strong relational support:** rangatahi Māori and Pacific youth have much to gain from strong relational support provided by mentors and role models in their lives, including teachers and other educators. Often, the relationship needs to be invested in before these youth build trust, openness, and reciprocity into their interactions; however, once this trust is built, these relationships can be crucial to the young persons’ development.
- **Cultural care:** rangatahi Māori and Pacific youth benefit from programmes that not only acknowledge their culture but also support them in embracing their culture as a part of their identity. Connection to culture has been shown to support the holistic wellbeing of rangatahi Māori and Pacific youth, and programmes.

“Māori have also consistently told us that for rangatahi Māori, **success includes having a sense of belonging and connection with culture in addition to education and employment outcomes**. Taking a Tiriti-informed approach to this topic reinforces the government’s responsibility to ensure the education and employment system delivers ōritetanga (equality) for Māori as New Zealand citizens. It also provides an opportunity to enable government to exercise its kāwanatanga (governing) role appropriately, and for Māori to exercise greater rangatiratanga (agency and authority) over how the education and employment system works for rangatahi Māori. This includes a focus on recognising and supporting iwi, hapū and diverse Māori communities as knowledge holders, decision makers and enablers of individual and collective – including whānau – wellbeing.” – New Zealand Government 2023: 14



## Students with disabilities and/or are neurodivergent

## Research summary - Opportunity

Students with disabilities and neurodivergences face unique challenges when transitioning between secondary education and further education or employment. Oftentimes, these students are moving from a school environment with a considerable degree of structure and predictability to an environment lacking the same structure, rules, and expectations. These students are often not provided with the support needed to make this transition smoothly.

Moreover, students with disabilities and/or neurodivergences often do not thrive under the learning conditions provided in mainstream education. Some will prefer to work with their hands, engaging in tactile and practical learning, whereas others might excel academically but need further educational support in areas like communication and soft skill building.

- Up to 32% of New Zealand's disabled and neurodiverse young people spend time in limited employment between 16-24.
- Disabled and neurodiverse young people often face discrimination in places of education or employment, as well as across multiple other areas. They may be underestimated and not recognised for the work they do, contributing to systemic inequalities and barriers.

"... disabled young people are more likely to experience long-term limited employment than the total population. **Around 32% of disabled young people spend more than half their years between the ages of 16 and 24 in limited employment.** Disabled people make up around 2% of all 16- to 24-year-olds, and make up 3% of those who spend more than half their years aged 16 to 24 in limited employment." – New Zealand Government 2023: 18

### *What do students with disabilities and/or neurodivergences need?*

- **Active participation:** Students with disabilities and/or neurodivergences should be given the same opportunities to actively participate in the class and learning material as any other student. This will often mean making accommodations, whether with physical architecture, the activities, or the assessments, and means promoting an inclusive environment where everyone feels as welcome to participate as one another.

"The classroom environment needs to be a space where neurodiverse students feel accepted and valued for being who they are. **When neurodiverse students feel a sense of belonging, they are more likely to actively participate and engage with their learning.** Along with supporting students to build supportive relationships, creating a structured and predictable environment with clear routines and rules is essential in supporting neurodiverse students to flourish at school. Making adaptations to the environment to reduce sensory overstimulation often needs to occur before neurodiverse students can begin to engage in learning." – Mirfin-Veitch 2020: IV

- **Diverse experiences:** Giving disabled and neurodiverse students a wide range of exposure to different educational spaces, employment pathways and working environments can help these young people to build an understanding of the diversity of options, engage their curiosity and learning, help to build a community and sense of belonging, whilst also giving them opportunities to learn the rules and routines of careers/tertiary education.

"Work experience, work-based learning and shadowing opportunities in secondary school help to familiarise young people with employer expectations and workplace norms, and to create job-relevant connections to employers that can assist them to find and secure a job. **This is especially important for disabled young people who tend to have less early work experience via after-school or holiday jobs than their peers...** For young people with more complex needs, strengths-based case management provided by a trusted mentor or advisor can also help to build confidence, access wider services, and remove wider obstacles to employment" – New Zealand Government 2023: 36

A whole school approach to careers education and transition readiness finds innovative opportunities where careers exploration and engagement can be woven into education across a students' entire school career.

“Stemming from this research, it is recommended to **expand career provision beyond the responsibility of the career adviser** to improve educational and employment outcomes for students from low SES backgrounds. A model which takes a **whole-school approach** to career education values the expertise of the career adviser but **spreads obligations for career support amongst all members of the school, particularly classroom and subject specialist teachers** (Parliament of Victoria, 2018; Yates & Bruce, 2017). Within this model, all teachers embed career knowledge and linkages in their lessons and curriculum and are available to students for career conversations (Furbish & Reid, 2013; Yates & Bruce, 2017). In this way, students can build on existing relationships that they have already developed with their classroom teachers to further develop their understanding of the post-school education and employment pathways available to them. A whole-school approach which **increases a student's network expands the social connections and social capital of the student allows them to access the knowledges, experiences and cultural capital of the broader school staff, and promotes educational aspiration and attainment.**” – Groves et al 2023: 531

- Events like careers fairs, guest speakers, or visiting exhibitions, which can be attended by all students are, of course, an excellent way of learning about a large number of career paths all at once but may also be overwhelming if not accompanied by other forms of career's support.
- A whole school approach ensures that all students are exposed to careers education and some degree of career exploration, from their first years in secondary school (ideally, they would have started this earlier, in primary school!)
- Careers education should always be present, but in a subtle and at-times observational manner (“this x would be good for y”), allowing students to normalise the process of thinking about their future and what their options, interests, and goals might be.

### ***What does a whole school approach look like?***

A whole school approach does not confine careers education to its own realm, but instead integrates careers education throughout the regular curriculum by drawing attention to the relevancies and connections between the disciplinary spaces of learning and the real-world. This might be teaching about how builders use maths, or exploring what transferrable skills can be built while studying history.

- Building the career-readiness skills of students – practical skill and soft skills – and ensuring that they are given opportunities to practice and reinforce them is a core goal of a whole school approach.
- Students may better leverage the student-teacher bond to learn more about various career paths. This is important as many adolescents may require some trust building before they open up to teachers and are in a space where they are ready to receive and internalise support.
- Students begin to think about their futures and careers earlier, meaning that they are building the self-efficacy and planning skills needed to attain this goal as well as building a greater understanding of the relationship between their time in education and their time beyond it.

“Australian students usually participate in careers-related activities in the later Middle Years (Years 9 and 10), when decision-making takes place around elective subject selection for the Senior Years. As a result, the decisions made in the later Middle Years can impact senior secondary schooling (Ellerbrock et al., 2018; Trusty et al., 2005) as well as postsecondary educational and career options. **Researchers strongly recommend early interventions that focus on improving students' educational and career readiness skills to offer students an informed foundation from which to base their decision-making...** Research has shown that Middle Years students reported significant increases in levels of agency, awareness of career opportunities and confidence in their ability to explore and plan for future careers after participating in a series of interventions.” – Mahat et al 2023: 411

The term NEET (Not in Employment, Education or Training) has flooded recent literature, regularly in connection to concepts like 'risk', 'vulnerability', 'deviance', and 'disengagement'.

NEETs are young people aged between 16-24 who are not actively engaged in or looking for employment, education, or training. While it is common for many young people to spend some time not in employment, education, or training in these years, NEETs are those who spend an extended and unstructured out of employment, education, or training. They are of particular concern as:

***Being a NEET may have short-term and long-term scarring effects:***

- "Significant experience of employment at ages 16 to 24 has immediate implications for youth wellbeing, with evidence that long-term unemployment, benefit dependency and enduring low income have **negative impacts on mental health and social relationships**. Long-term low-paid, insecure work can also have negative impacts on health and access to training which can limit future employment opportunities. Young people who experience long-term limited employment are more likely to face issues with housing and homelessness, and to engage in risky behaviours such as drug use and criminal activity...there is robust evidence that **significant early experiences of unemployment can have a 'scarring' impact on young people's future job prospects and wages.**" – New Zealand Government 2023: 11-12.

***Those at-risk of being NEET often face multiple, complex vulnerabilities:***

- "These findings show that **young people and their whānau who experience significant limited employment are much more likely than the total population to have had early involvement with a range of government agencies, services and/or targeted interventions (including justice, welfare, housing, education and mental health)**. This may indicate that targeted government services and interventions are reaching individuals and their whānau with high needs. However, it also highlights the underperformance of core government services and the failure of existing education, welfare and employment system responses to deliver equitable outcomes for current and future generations of young people." – New Zealand Government 2023: 20
- "... life events or experiences that often occur earlier in people's lives are also associated with the likelihood of experiencing significant limited employment at ages 16 to 24. These include a **range of factors associated with the early home environment, socioeconomic circumstances, and experiences within the education, justice, mental health and welfare systems as a child**. In turn, early life experiences are strongly associated with education and employment outcomes in adolescence and early adulthood, such as leaving school with low or no qualifications." – New Zealand Government 2023: 20

**See:** Boat et al 2021; Brown et al 2022; Holliman et al 2023; Kis 2016; McGregor and Mills 2012; Mills et al 2016; New Zealand Government 2023; Sanders 2020.

### Opportunity youth

Opportunity youth is a term that resituates NEETs as opportunities, to be explored and used, rather than as problems to be fixed

"As many as 85% of these youth report that it is extremely or quite important to obtain a good job or career (Bridgeland & Milano, 2012). As such, Bridgeland and Mason-Elder (2012) have characterized these youth as "opportunity youth — both because they are seeking opportunity and they present an opportunity to our nation if we invest in them" (p. 5). Although many of these opportunity youth have expressed the desire to obtain employment, due to a range of systemic issues including racism and the intersectionality of race, gender identity, and economics (e.g., Crenshaw, 2013) — many of these youth experience complex issues such as homelessness, mental health challenges, and health and educational disparities that make it hard to secure employment or launch a career." - Boat et al 2021: 1

We do not care about NEETs just because they are economically unproductive – we care about NEETs as this status indicates a dysfunction in the life of the young person – whether this dysfunction is within the family, the self, their identity, or their social position – and this negatively impacts their wellbeing.

A life course approach is one that does not just turn its attention towards the at-risk NEET as a fully-formed ‘risk profile’, nor does it look at the ‘risk profile’ in isolation of the individual and their experiences. A life course approach is thus multipronged:

- Firstly, it focuses interventions and supports at all parts of the life journey, putting in place preventative interventions, starting all the way at maternal health and wellbeing and moving through the education system, rather than just relying on reactive interventions.
- Second, when engaging with an individual who is NEET or at-risk of becoming NEET, it should always be front of mind that the young person is not just a ‘risk profile’ but is an individual with a complex and unique history, with their own strengths and aspirations.
- Finally, a life course approach seeks to equip young people with the skills and resources that they need to thrive well into the future. A life course approach is concerned with wellbeing along all points of the journey, and all interventions are designed to be cognizant of a young persons’ past, present and future.

“From age twelve, signs of early educational disengagement start to increase, reflected in measures such as falling regular school attendance. In turn, regular school attendance has a strong relationship with student wellbeing and educational attainment... **Children who exhibit challenging behaviours such as hyperactivity, aggression and peer problems from a young age, and those who experience trauma, stress and deprivation early in life typically gain the most from early interventions to support self-regulation.** Parenting programmes can also play an important role in supporting the mental wellbeing of new parents which in turn contributes to the long-term emotional, mental and physical wellbeing of their tamariki. A focus on parents’ mental wellbeing may be particularly valuable for young mothers, especially sole parents, and their children.” – New Zealand Government 2023: 29

### ***What does a life course approach look like?***

- While there should, of course, be interventions targeting students who are already in the process of, or at risk of, disengaging from their education, this should be coupled with interventions that take a **life course approach** and take into consideration how negative events and associations build up over time to create these risk profiles.
- The education system and the school ecosystem should be better equipped to identify and manage risk factors early. This might look like dedicating more resources to mental health and social services support to reach students who need it or providing more thorough teacher training to identify the early signs/symptoms of disengagement and where to point them to get the help they need.
- Interventions should target the holistic wellbeing of young people, acknowledging that their ability to thrive is interwoven with multiple, interlocking domains of life, including familial wellbeing, spiritual and cultural connection, economic and housing security, and so on.

“Understanding and tackling NEETHood requires an **ecological approach** (Lörinc et al. 2020) and a conceptual model which can **account for multiple nested and interrelated areas of risk (personal, social, institutional, familial, structural) while acknowledging the agency of young people in navigating and responding to these ‘binds’** (Brown, 2014; Brown et al., 2021). Such an approach tempers the potential hazard of misrecognizing risk factors that could lead to inappropriate and ineffective interventions. For instance, mental health problems can ‘camouflage’ social problems among NEET young people” Brown et al 2022: 459

**Work Integrated Learning programmes serve diverse communities and student populations. This diversity should be reflected in programme design and delivery, with the curriculum and pedagogy structured to meet the goals of the programme and the needs of the students.**

Often, there is a fair amount of flexibility in how Work Integrated learning programmes are delivered – the diversity of possible activities within these programmes, in addition to the high degree of influence that students can usually direct over their learnings, mean that the curriculum is always evolving. However, they always centre on a disciplinary space and a goal and use education to forward that goal.

Students thrive when the curriculum and pedagogy are:

- Strengths-based, focused on identifying and building upon the individual abilities and experience of students, while looking for areas to hone their skills further
- Intellectually challenging and engaging
- Designed to meet the needs of the students whilst also providing an educational experience that allows students to flex their skills, build new ones, and discover passions/interests
- Able to integrate theoretical learnings with real-world practice, whether in the field, the lab, or the site.

In their study of alternative education sites for marginalised students (teenage parents, students with high suspension or expulsion rates, etc.) in Australia, **McGregor and Mills 2012** observe that:

**“Learning programs within the schools thus varied depending on their context and clientele.** Common across the research sites was the endeavour to **cater to the needs of the students** who chose that particular place. Some were classed as ‘schools’ whilst others as ‘centres’ and ‘work sites’. Accordingly, there was a diversity of offerings and students had to seek out the site that would give them the best chance of fulfilling their goals.” p. 9

“... by itself, such practical support, whilst extremely important, would not have been sufficient to keep these young people at school. Attention was also given to **creating school structures, curricula and pedagogy that made the schools attractive to the students.** Such conditions have been widely recognised as critical for re-engaging young people in education (AIG & DSF 2007).The structures within these schools acknowledged, for example, that there were **often life circumstances that required flexibility of attendance.**” – p. 15

**Mills et al 2016** conduct a similar investigation, finding that in these schools, the curriculum and pedagogy served the needs of the students and supported them to realise and reach their goals.

"In the case of marginalised students, **care and support is likely to involve solidarity expressed through curriculum and pedagogy that values, respects, and builds upon the knowledge and cultural backgrounds of students,** while also supporting their capacity to engage with the kinds of knowledge that contribute to success at school and beyond." p. 14

“The kind of work that a person does has an impact upon who they become and on their emotional, physical and intellectual well-being. **People experience enjoyment in doing complex tasks that enable them to employ and extend their capacities.**” p. 18



# Integrated community and industry partnerships

**Community and industry partnerships** are the lifeblood of many WIL programmes. They **significantly increase the learning and work experience opportunities available to students, foster important connections between students and local economies, and provide essential resourcing and financing sustainability to schools**, who are often overburdened.

- A primary purpose of community and industry partnerships is to connect students to work experiences, knowledge, and places. These partnerships give students insight into the diversity of available careers within an industry, whilst allowing them to explore many of these paths first-hand. This has several benefits to student engagement, by allowing them to put skills into practice, by building a closer affinity between industries and students, and building pride in and connection to local industries and economies.

“Multi-stakeholder, whole-of-community partnerships **provide increased opportunities for students to explore a range of career options and pathways** (Torii, 2018) thereby expanding the capitals of students involved. Further, such approaches to career partnerships **allow career education to be tailored to the needs of the local region** and reflect the differing needs and goals of diverse learners (Education Council, 2019; Torii, 2018). Established according to best practice (Austin et al., 2020), multi-stakeholder partnerships have the potential to alleviate inequities and support the consistent, quality provision of career education.” – Groves et al 2023: 531

“Many principals emphasised the importance of **connecting students with adults from the local community to create opportunities** for students to be exposed to authentic learning environments for career related knowledge... by engaging regional industrial partners, the experiences of principals who participated in this study helped show that local RRR [remote, regional and rural] communities can make a meaningful contribution by exerting **positive, context-rich knowledge on students**. This should be further developed with more targeted professional development opportunities for local school staff to learn about a range of careers and the emerging opportunities for RRR students. “ – Gao et al 2022: 8

- In addition to the benefits to the student, community and industry partnerships are also beneficial to those communities and industries that do the partnering, and to local economies in whole. This effect is felt particularly strongly in rural areas. The theme of promoting positive narratives about the employment and career advancement opportunities in rural areas was prominent across the literature as a means of supporting local economies and maintaining community wellbeing.
- Finally, community and industry partnerships often provide crucial resourcing to schools to support the sustainability of programme delivery. Many WIL programmes are resource intensive and require specialised equipment, and these partnerships can help schools to obtain these resources where they might otherwise struggle.

“**Working in partnership with iwi, community sector organisations and employers:** Stakeholders viewed building strong connections and working alongside those who know their communities and regions best as **key factors for the successful expansion of the scope, access and reach of education and employment programmes and services** across New Zealand.” – New Zealand Government 2023: 9

# Role models and mentors

**Role models and mentors are foundational to the transition success of young people, providing them with both practical advice and education as well as supporting psychosocial and emotional development.** While young people often find role models and mentors in their whānau and community, **teachers and other adults in education spaces are in a prime position to exert a positive influence on students.**

Formal mentorship can help to drive the development of confidence, self-efficacy, identity salience, and sense of belonging in a student. Often, formal mentorship will exist to serve a purpose and the relationship will be structured around that purpose – such as transition support or obtaining university entrance – however support regularly also extends to general support with wellbeing and development.

“The relationships that were part of the broader environment in the research schools were reflected in the teaching/learning relationships within the sites. The environment, that is the structures, procedures and pastoral care within each school, clearly shaped the ways in which the teachers/workers at the various sites engaged on a person level with the young people in the delivery of the curricula. **These relationships were identified by young people and workers alike as being central to the young people’s on-going engagement in the learning processes at the sites...** Supporting arguments made in a lot of the academic literature about early school leaving, the evidence derived from this study shows that **for young people who are most at risk of dropping out, it is the emotional labour of the teachers and workers that often makes a difference.**

Moreover, the pedagogy that flows from the closer relationships engages and motivates students.” – McGregor and Mills 2012: 13

“Familiarity with an educator who would help them with the wider aspects of their lives was highlighted by young people as integral. One-to-one and small group work helped them feel ‘safe and secure’. **Facilitating a trusting relationship with an educator who ‘proper gets me’ and will ‘have a chat when I’m having a bad day,’ led to young people feeling supported and cared for.** Educators explained that showing an interest and involvement in their day-to-day lives was seen to be a foundational process: ‘building that rapport and chatting about what they’re having for dinner . . . is just as important as the actual education-based session because it was all part of that building trust before the learning could take place.’ They argued that young people needed to feel that an educator was on their side to trust that the supporting adult.” – Brown et al 2022: 466

- Regarding informal mentorship provided by teachers or others in educator roles, the emotional labour conducted in this space is often identified as a pivotal component of student success. This goes for both "high achievers" and "low achievers", but for "low achievers", teachers and educators can hold a particularly important role as one of the potential few people who believe in the student and who can provide them with tangible support.
- Both formal and informal mentoring relationships can help to teach students the unspoken 'rules' of an industry or of education/employment spaces in general, introducing students to both the theoretical and tacit worlds of their industry.

**Effective strengths-based careers education gives students a comprehensive understanding of what future careers are available to them, and a roadmap to achieving this career.** Strengths-based careers education can take many different forms (formal mentoring, informal advice, careers advisor, events like careers fairs or industry-relevant events, etc.), but whatever the form, these supports should take into consideration the interests and goals of the students, while targeting their growth areas and skill development.

“Young people and their whānau tell us they want clear guidance to help navigate education and employment pathways while rangatahi are still at school (or another educational setting). This does not mean assuming that young people are ready to make major career decisions at an early age, or that career goals and aspirations won't change over time. Instead, **access to timely, high-quality careers guidance enables young people to understand the consequences of their education choices and to exert agency.** Setting and working towards post-school goals can also **help to motivate educational engagement and ensure young people make well-informed education choices** that align with their skills, interests and aspirations for the future... Expanding access to strengths-based careers advice and guidance provides an opportunity to raise young people's awareness of a full range of possible careers including, for example, future job opportunities for young women in non-traditional employment sectors and opportunities to 'earn while you learn.' – New Zealand Government 2023: 35-38.

- Strengths-based careers education is important to enable young people to learn about their options and the diversity of careers, and then put in a plan to reach this. Crucially, good careers education must be clear about what the impacts of education and other choices are, and what educational, training, and employment options are available to them, to ensure that young people have agency in their career decisions.
- Some authors have drawn upon Bourdieu's theories of social capital and habitus to explore how differences in socioeconomic status may impact on careers education and careers knowledge. Low socioeconomic and other disadvantaged students regularly rely on informal sources of information for their career's advice - while this does present these young people with some opportunities, they may miss better opportunities due to a lack of knowledge or experience. Furthermore, as young people miss opportunities, they miss out on essential professional and social development that may further disadvantage a student compared to their peers. Effective strengths-based careers education should remedy these disparities in social capital by giving disadvantaged students the capital they need to meet more advantaged students. Students who come from low socioeconomic backgrounds often rely on **informal** careers education over **formal** education, giving them an even greater opportunity to benefit from strengths-based careers education.

“There is evidence that **young people from low SES [socioeconomic status] backgrounds are more likely to rely on informal, 'word-of-mouth' knowledge about careers** from social sources such as family, friends and teachers (Ball & Vincent, 1998; Greenbank, 2011; Smith, 2011; Vernon & Drane, 2021) than from formal sources produced by governments, institutions and schools; and communicated via websites, enrolment information, and statistical data (Smith, 2011). **Given that students from low SES backgrounds may not have ready access to informed sources or to those who have direct experience, it is perhaps unsurprising that decisions about futures are made with limited or incorrect information resulting in more difficult transitions** (Mann et al., 2020). As a result of embedded social inequities, **students from low SES backgrounds also draw upon social, economic and cultural capitals in diverse ways, when aspiring and making decisions about their future careers.**” – Groves et al 2023: 523



**Transition support is the next step beyond careers education and involves equipping students with the skills to not only survive but thrive in their post-secondary environment.** Tailored guidance that gives students bespoke support to build their transition-readiness can be critical for many students, particularly those underrepresented in their chosen field, to build the skills and knowledge to navigate their future prospects.

- Providing students with tailored transition support means giving them the tools, resources, and skills required to move from one setting and phase of life to the next. This is both more immediate in nature than careers education and more nebulous in its breadth. Moreover, while careers education is intrinsically tied to particular fields and industries, transition support can be tied to specific fields/industries, or it can provide students with a broader set of generic skills and resource that will support them wherever they are, like soft skills and transferrable skills.

“Assisting young people to explore, experience and think about their future prior to leaving school is especially important for young people who are more likely to experience limited employment. This requires providing access to more intensive, tailored support to those who need it... **Improving access to tailored, practical support to plan next steps beyond school, navigate selection requirements and application processes, and to find and keep a job can help to deliver more equitable youth employment outcomes...** Early opportunities to explore the job market and to engage with industry and employers can also support young people to develop and clarify their career ambitions and how to achieve them.” – New Zealand Government 2023: 36

In particular, tailored transition support helps students who may not have the most sophisticated skills or social capital to draw on to successfully transition out of the highly structured secondary education setting and into worlds that have their own sets of knowledge, language, coding, social hierarchies and dynamics, and expectations.

**Groves et al 2023** explores the concept of social capital in the context of low socio-economic students, but their learnings can be expanded to a broader subset of students, including minority students, students with disabilities or neurodiverced, or students experiencing any other kind of marginalisation.

“As a result of embedded social inequities, students from low SES backgrounds also draw upon social, economic and cultural capitals in diverse ways, when aspiring and making decisions about their future careers (Greenbank, 2009). For example, in order to enact one’s aspiration, **an individual needs to draw upon knowledge, skills, networks and resources to successfully manoeuvre between complex educational institutions and vocational structures** (Smith, 2011). Navigating this process requires a specific understanding of the ways in which large institutions and pathways into and through education and work operate. **Often, students from low SES backgrounds have not experienced or been exposed to these understandings in order to successfully direct themselves through this journey** (Irving, 2009). Formation of aspirations are also shaped by socioeconomic background. Although research has shown that students from low SES backgrounds have similar career aspirations to those from higher SES backgrounds (Gore et al., 2017), Smith (2011, p. 166) argues that those aspirations can be more ‘brittle’ as a result of having fewer concrete experiences, opportunities and resources to draw on when navigating pathways... In these ways, education and employment outcomes for students from low SES backgrounds are shaped by their and their families’ experiences, as well as the resources available to them.” – Groves et al 2023: 523

Central to interventions aimed at increasing the career-readiness of students is opportunities for authentic learning experiences. There is strong evidence that **by linking a students' learning experiences to real-world experiences, industries, knowledge, and potential career paths, students not only learn more effectively, but they also build their self-efficacy and confidence to a greater degree.**

- In some cases, authentic learning experiences can be driven by providing students with work experience and job shadowing/work visitation opportunities, allowing them to spend some time in the workplace and participate in their routines and practices. This has the benefit of providing students with some exposure to a workplace, including the expectations and responsibilities that are different to school, and the diversity of career options and possibilities.

“Increased real world opportunities for authentic practice and refinement of skills considered essential in one’s chosen career was an important feature of placements. In the professional work environment, students were able to see how their decisions and actions impacted on others, encouraging students to think more critically, engage in self-reflection, and strive to develop professionalism and social responsibility. **Having practical experience in performing career-specific skills and tasks served to increase confidence and a sense of responsibility and accountability in students.**” – Jackson 2013: 16

“Work experience placements provide an opportunity for participants to sample particular job roles and develop a better awareness of different industries... **highly-structured placements – designed to be interactive, engaging and provide opportunities to sample various aspects of a particular profession – can lead to a substantial increase in participants desire to pursue careers in challenging sectors** (i.e. healthcare).” – Buzzeo and Cifci 2016: 11

“First-hand experiences of the workplace such as part-time work, work placements and volunteering can help young people **imagine their possible futures in work, confirm or contest their plans and provide them with an opportunity to develop their capacity to aspire.** These experiences also allow them to develop the **technical and social skills** that employers seek (Mann, Denis and Percy, 2020[2]), to develop their own social capital (developing networks among people beyond teachers and family members who can ultimately prove helpful to students through their transitions), including contacts who can provide advice and guidance as well as practical help by providing recommendations, references or even employment itself (Hensvik, 2013[50]).: - Covacevich et al 2021: 35

- In other cases, students can gain authentic learning experiences in the course design and activities. While this does not connect the learnings to a workplace in the same way, this does connect learnings to real-world settings and may allow for a more interactive, experimental, and engaging experience overall as there is more freedom allowed in course design.

“Many principals stressed that career exploration activities should be integrated into the curriculum rather than implemented in a disperse and one-off approach... Some participants argued that **to engage students with work experiences an authentic learning environment is indispensable.** Educators should not only instil cognitive concepts and knowledge about different careers but also create the opportunity for students to ‘feel’, ‘touch’, and ‘immerse’” – Gao et al 2022: 8

- Whatever the method, literature consistently drives home the point that students learn best when they are able to create real-world connections with the content they are learning, and when they are given the opportunity to put learnings into practice to experience them, building their tacit knowledge. Often, hands-on learning is also simply a more enjoyable experience than classroom learning and can help to engage students through novelty and excitement. Authentic learning experiences also give students the opportunity to realise that perhaps they actually don’t enjoy an activity as much as they thought, and can contribute to the overall pursuit of a career path.

# Skills: practical skills/qualifications and soft skills

**One of the most tangible and easily-measured outputs of WIL programmes is the qualifications, the practical skillsets, and the soft-skills that students build, equipping them with a range of tools to enter their field with confidence and a head start.**

- Providing students with formal qualifications and practical skills gives them a head start in their career journeys. By gaining qualifications and practical skills in secondary education, students have the opportunity to bridge theory and practice as they explore their career options and begin to give shape to their own interests and career journey. As students build their knowledge, allowing them to gain industry-recognised qualifications at the same time gives students something tangible that they can bring with them on their next step.

“There was also a focus on learning work skills; for example, Woodlands ran a ‘work on trial’ program providing opportunities to obtain experiences in local workplaces and also combined regular subjects with a program focused on obtaining Vocational Certificates in Retail and Construction. The opportunity to obtain vocational qualifications was common across a number of the sites... **Students appreciated the more hands-on approach.** There were also opportunities to do short courses to help with employment, e.g. barista training, first aid courses and photography. Programs offered at these alternative schools also included courses and activities that contributed to the personal development of their students... **The sites provided a schooling experience that was positive enough to make these young people want to reconnect to learning and allow them to dream different futures for themselves**” – McGregor and Mills et al 2012: 9

“The final analysis showed that employment skills played a central role in successful employment outcomes. The bivariate analyses suggested that **young people with more positive relationships and higher levels of individual resources reported more employment skills**, while youth exposed to higher levels of individual risks and with fewer positive relationships had fewer employment skills.” - Sanders et al 2020: 10

- The terms ‘soft-skills’ and ‘non-cognitive skills’ encompass a broad range of skillsets that relate to an individuals’ ability to manage themselves and engage successfully with others. This includes skills like motivation, perseverance, responsibility, teamwork, communication, diplomacy, emotional management, and grit. **These skills can indicate a degree of maturity in a young person and can support their social, emotional, and psychological wellbeing through their transition to further study or employment.**

“There is robust New Zealand and international evidence that programmes to support cognitive skills and socio-emotional development in the early years can provide a costeffective way to mitigate inter-generational disadvantage and improve life chances, including health, education, justice and employment outcomes later in life. In part, **these findings reflect the pivotal role that early socio-emotional development plays in influencing later educational engagement and other life outcomes.** Key elements of socio-emotional development include the ability to express and understand emotions, regulate emotions and behaviour, and use social relationship skills to solve problems ” – New Zealand Government 2023: 28

# Identity and belonging

**Having a sense of identity and belonging to a field, school, industry, or discipline, can be a key driver of success and satisfaction.** Evidence suggests strong links between identity/belonging and improved performance (in both academics and employment) due to the field, school, industry, or discipline becoming a part of self-worth and self-concept. Therefore, connecting student identity to the school and the industry can support not only the academic engagement of students but also their overall development and psychosocial wellbeing.

- Students with higher rates of belonging to their school demonstrate improved psychosocial and emotional development and wellbeing.

**“... school belonging has been associated with higher levels of happiness, psychological functioning, adjustment, self-esteem and self-identity** (e.g. Jose et al. 2012; Law et al. 2013; Nutbrown and Clough 2009; O'Rourke and Cooper 2010), and is inversely related to incidents of fighting, bullying and vandalism, disruptive behaviour and emotional distress, risk-taking behaviours such as substance and tobacco use, and early sexualisation (e.g. Goodenow 1993; Lonczak et al. 2002; Samdala et al. 1998; Wilson and Elliott 2003)... A sense of belonging has been found to also facilitate transition into adulthood (Tanti et al. 2011) and is particularly important in middle adolescence where disconnection from schools and peers has frequently been reported (O'Brennan and Furlong 2010). **Negative experiences related to a sense of belonging during adolescence can have a profound effect on psychosocial adjustment (Allen et al. 2014), whereas a sense of belonging can aid successful psychosocial adjustment”** – Allen et al 2018: 2-3

- For students who are disengaging or not connecting with their education, WIL programmes that foster a sense of identity and belonging can promote their re-engagement.

“Building a sense of belonging and fitting in for the young person was viewed to be the ultimate mechanism for generating participation or re-engagement with educational and work goals: ‘it’s really important for them to see students a little bit like them, even though they might speak a different language or be from a different culture, I think they recognise when they see themselves and they’re in the right place.’ **Having the confidence to explore a different identity or make education and work goals part of their current sense-of-self were discussed to be important processes in leading to change for these young people.”** – Brown et al 2022: 468

- Students who belong to groups underrepresented in a field/discipline may face discrimination or ostracization, and therefore benefit even more from having a strong sense of identity and belonging with their field/discipline.

“Numerous studies have supported the contention that persistence in STEM education not only requires mastering the technical skills needed to be a scientist, but also **entails a social psychological process by which students begin to see science as a salient part of their identities...** Research on the role of science identity underscores the **importance of social interactions that allow students to be recognized—and to recognize themselves—as scientists**, as experiences that make students more likely to translate their skills into STEM careers. Evidence further indicates that **these processes may be amplified for female and/or minority students who may encounter a “chilly climate” in which their opinions and efforts are discounted in scientific domains that are culturally constructed as masculine or white** (Brickhouse and Potter 2001; Lee 1998, 2002).” – Merolla & Serpe 2013: 5

# Autonomy, empowerment and dignity

Ultimately, students should be coming out of Work Integrated Learning programmes with an enhanced sense of autonomy, empowerment, and dignity. **Students should have been given the opportunity to learn about both themselves and the world in a context that is safe, with educators and mentors who are considerate of each student as an individual and their unique journeys.**

While the practical, educational and experiential components of building a students' future readiness are, of course, foundational to Work Integrated Learning programmes, underlying this is a need to build a student's autonomy to learn and drive their growth independently, empower students to reach their future prospects, and treat them with dignity and respect so that they have the confidence to realise these prospects.

- This means giving them the self-confidence to realise their own self-worth and abilities, balancing the required guidance with a healthy dose of independence and trust. It means giving students the knowledge and the skills to use the tools they receive throughout their learning journey to achieve their goals. Crucially, students should have control over their work and be trusted to complete it. By treating adolescents with the expectations of maturity and responsibility you would an adult, adolescents will grow into that role and have space to experiment with their own identity and independence.

“The importance of a **secure sense of self-esteem and confidence in generating a strengthened sense of agency over learning and achievement** may be explained through the role of hope as a byproduct of a more positive worldview generated when young people feel good about themselves (Simões et al., 2021).

Furthermore, Santos et al.'s (2020) work has demonstrated how a sense of ownership over educational and work pathways is contingent upon educators personalizing options to young people's circumstances. There is good reason to think, therefore, that **a sense of agency is increased when young people believe that positive but realistic education goals are a possibility for them.** Self-esteem and agency over learning may also be self-reinforcing mechanisms; such are the implications of Pruano et al.'s (2022) finding that **agency over learning leads to motivation, which reinforced young people's sense of self-confidence in achieving work or education goals.**” Brown et al 2022: 469-470

- Supporting students to build autonomy, empowerment and dignity is a form of **contributive justice** that enables students to develop a sense of pride in learning and their learning outcomes. However, in achieving this, learning must be shown to have a purpose that is evident to students, it must have some connection beyond the world of the classroom, and it must be available equally to all who seek it.

**“Dignity is also enhanced when people have control over their labour in that they are trusted, understand their contribution to the larger project, and have an opportunity to question their and others' roles** throughout the process of conception and execution of a project. Understanding the various links in a project and reasons for embarking on a particular task also ensures that even mundane tasks when shared around are meaningful. There is great resonance here with schooling and classroom work.” – Mills et al 2016:19



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