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Evaluation | Analytics | Insights

Prepared for:
Te Pūkenga

Work-based apprentice retention

Final report

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Contents

Key contact

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Mihi/Acknowledgement

We would like to acknowledge the ākonga who participated in this research. We thank them for giving up their time to share their stories and experiences with us, and tautoko the courage of those for whom this was especially difficult. We wish you all every success with your future endeavours.

Ngā mihi nui ki a koutou, Trudie Walters (Research Manager, Scarlatti)

Executive Summary

Defining the problem

Work-based apprentice numbers have increased significantly in recent years – from about 48,500 in 2019 to more than 75,000 in 2022 (a 55% increase). Much of this increase is credited to the Apprenticeship Boost scheme introduced in August 2020, providing financial incentives and support for employers and apprentices.

Of concern is the trending decrease in retention rates of apprentices, in particular in the first year. The first-year retention rate of apprentices has decreased from 76% in 2018/2019 to just 67% in 2022. We note that there is variability between work-based providers, and between programmes, industries and learner cohorts.

Objectives of this research

This research was undertaken from August to November 2023. The aim was to understand the various reasons why an apprentice chooses to withdraw from their programme, and what can be done about it. A mixed methods approach was used to address the following objectives:

- Identify the relative importance of factors influencing ākonga decisions to withdraw from their apprenticeship
- Identify what ākonga are doing post-apprenticeship, and why
- Propose a series of interventions to help improve retention rates, informed by the findings.

We note that considerable research has already been undertaken to understand the reasons and drivers behind apprentice attrition in New Zealand and internationally. We have therefore sought to build on this work rather than reinvent the wheel. A lot of the ideas proposed in this work are not new: they have already been identified in previous research, including that done by work-based providers.

We wanted to consider how apprentice retention can be increased at the *system level*, through a unified system approach that uses the learner journey as a lens for bundling of intervention ideas.

Principles driving this approach include:

- Enhanced scaling of existing interventions with proven success
- More nuanced interventions with better triaging of services to match the learner needs
- Greater consistency across the system of services and products available to ākonga
- Increased data maturity and evidence-based decision-making.

Reasons for apprentice withdrawals

We have identified a diverse range of reasons why ākonga withdraw from their apprenticeship programme, based on 105 semi-structured interviews. In most cases, there is not one single reason for withdrawing, but rather a combination of reasons. This combination differs from learner to learner. This work has sought to understand and untangle the multiplicity of these reasons, rather than reducing them down to a single tick box. The implication, however, is that there will not be a silver bullet solution to addressing apprentice attrition – a suite of solutions will be required.

Broadly, reasons can be categorised into three groups:

1. **System level factors** – reasons relating to the training programme, which may or may not be within Te Pūkenga's control
2. **Employment factors** – reasons relating to their employment situation, employer or workplace
3. **Personal factors** – reasons relating to their personal aspirations or circumstances.

The breakdown of high-level reasons is approximately equal, and this finding aligns with previous research. The percentage of ākonga that identified each reason as a main factor, other important factor, or otherwise mentioned it are summarised in **Table 1**.

Table 1: Interview reasons (105 ākonga interviews, August – November 2023)

Category	Subcategory	Main factor	Other important factor	Other mention	Total mentions
System issues	Government compliance / policy	-	-	-	-
	Government incentives	2%	3%	6%	**10%**
	Low wages	7%	2%	4%	**12%**
	Natural disasters	-	-	-	-
	Delivery and assessment	18%	12%	8%	**38%**
	Training advisor support	13%	7%	5%	**25%**
	Cultural responsiveness	-	-	2%	**2%**
Employment issues	Employer support	46%	4%	5%	**54%**
	Workplace culture / conditions	23%	-	-	**23%**
	Wages	3%	3%	2%	**8%**
	Training costs	3%	3%	1%	**7%**
	Compliance requirements	-	-	-	-
Personal reasons	Dream vs reality	10%	8%	4%	**21%**
	Change in personal circumstances	23%	2%	3%	**28%**
	Literacy/numeracy	-	1%	1%	**2%**
	Transience	-	-	3%	**3%**
	Gender	2%	-	2%	**4%**

What we find is that the reasons for withdrawing are the same now as they were ten years ago. That is, an increase in new apprentices in recent years has magnified the problem.

Where do withdrawn apprentices go?

Our analysis of Ngā Kete, TEC and Stats NZ IDI data found that 40% of ākonga who withdrew in 2021 were still with their employer one year after withdrawing from their apprenticeship, while 21% had moved to a new employer in the same/similar industry. A further 21% changed to a different industry.

Evidence-based approach to prioritising interventions

The final objective of this research was to identify where Te Pūkenga could prioritise efforts to address the reasons for withdrawal (within their control). This task had two parts:

1. **Provide additional details** – provide some additional details and nuances to intervention ideas, noting that many of these ideas are not 'new' and have already been identified by WBL divisions and previous research. However, the interviews and broader analysis provide useful nuances.

2. **Estimating the potential impact** – provide quantitative evidence to indicate which interventions are likely to have the greatest impact on reducing apprentice attrition at a *system level*.

Following are some possible interventions Te Pūkenga could explore to address apprentice attrition, grouped according to the opportunity size and our proposed prioritisation.

First-tier priority

What this quantitative evaluation indicates is that provision of targeted support in the first year of the apprenticeship should be accorded highest value and importance, for its level of impact.

- **Great Start first year success programme –** the highest priority should be intervening in the first year as this is when 33% of new apprentices withdraw from their programme. A first-year programme should encompass both refined delivery and assessment, and heightened ākonga support.

Second-tier priority

Interventions aimed at ākonga in the second and subsequent years of their learner journey should not be done in isolation, without also doing a first-year success programme.

- **Ongoing kaiwhakamana/mentor support programme –** taking a formalised, structured approach to ensure consistent and frequent support throughout their learner journey.
- **Employment/transition bridging –** assisting ākonga to find an optimal employer, and/or to bridge the transition between employers/WBL divisions/or parts of Te Pūkenga as needed.
- **Getting past the roadblocks** – identifying any common assessments/units that ākonga are having difficulty completing and facilitating a way for them to get some extra support to complete them.
- **Employer support –** understanding what additional support employers may need, particularly those with little prior experience with work-based apprentices, or those flagged as high-risk.

Third-tier priority

- **Completion grants –** providing financial assistance to ākonga close to finishing and for whom financial barriers may stand in their way.
- **Increased promotion of the value of apprenticeships** – ensuring that ākonga know the long-term progression value a qualification will give them.

Next steps

This research has not sought to dictate a set of designed interventions. Rather, it has aimed to pull together evidence to help us understand the reasons behind apprentice withdrawals, overlay this onto the learner journey, highlight some possible intervention areas and provide a suggested prioritisation for those ideas.

A number of the WBL divisions have implemented interventions to enhance retention, and we believe these can be leveraged and scaled up through conscious collaboration, learning and sharing.

Next steps for this work could include continued engagement and discussions with each of the WBL divisions providers to refine these ideas. Additional research can also be undertaken as outlined in the final section of this report, to enhance data robustness and evidence-based decision-making.

Introduction

Context

Work-based apprentice numbers have increased significantly in recent years – from about 48,500 in 2019 to more than 75,000 in 2022 (a 55% increase). Much of this increase is credited to the Apprenticeship Boost scheme introduced in August 2020 (see **Government incentives** for details of the scheme), providing financial incentives and support for employers and apprentices.

Of concern is the trending decrease in retention rates of apprentices, in particular in the first year. The first-year retention rate of apprentices has decreased from 76% in 2018/2019 to just 67% in 2022. We note that there is variability between work-based providers, and between programmes, industries and learner cohorts.

Considerable effort has already been directed into this area. We acknowledge the creators of this valuable body of work and have sought to build on it rather than repeating it. We took a holistic approach to reconcile their findings and draw them together with our own to provide new, actionable insights. We hope that this more nuanced understanding of what lies behind apprentices' decisions to withdraw will allow Te Pūkenga to develop effective interventions and retention strategies.

Research objectives and approach

Objectives

This research was carried out from August to November 2023, with three key objectives:

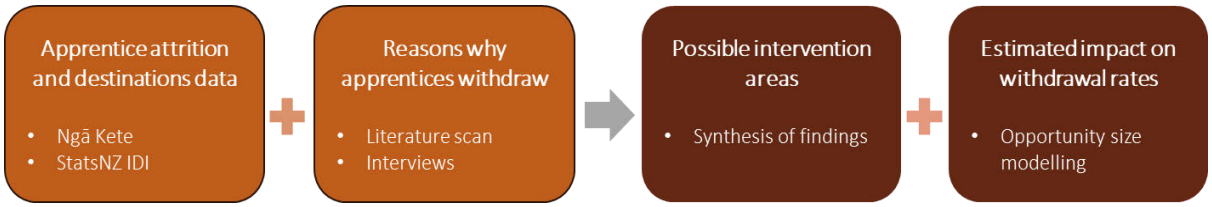
- Identify the relative importance of factors influencing ākonga decisions to withdraw from their apprenticeship
- Identify what ākonga are doing post-apprenticeship, and why
- Use the findings to recommend a series of interventions to help improve retention rates.

Approach

To address the research objectives, the project was conducted in four parts (**Figure 1**):

1. **Definition of the problem** – apprentice attrition and destination analysis. Comprises data from:
    - Results from Ngā Kete and Stats NZ Integrated Data Infrastructure (IDI) analysis.
2. **Causes of the problem** – analysis of reasons that apprentices withdraw. Comprises data from:
    - Information gathered through a scan of existing academic literature and industry reports
    - Interviews with WBL division experts
    - Interviews with ākonga who withdrew from their apprenticeship.
3. **Potential solutions to the problem** – possible ideas for interventions identified from a synthesis of the findings.
4. **Potential impact if successful** – estimated impact if interventions work using opportunity sizing.

Figure 1: Summary of research approach



Ākonga experiences and stories as taonga

The experiences shared by ākonga and WBL division experts for this research are a taonga gifted to us. We take this responsibility seriously. It is important that what they told us is not used to frame them or their communities in deficit ways: we need to use their experiences to improve the apprenticeship system.

We appreciate the great depth and breadth of ākonga experiences and perspectives that inform our findings. We present this report with the hope of improving equity and further enabling meaningful impact on the outcomes for the ākonga we serve.

Methodology

To address the research objectives, the project was divided into seven workstreams. Although labelled 'Workstream 1' to 'Workstream 7' they were not strictly sequential and occurred simultaneously and iteratively. These stages are described in detail below.

- **Workstream 1** – Scope and design
- **Workstream 2** – Engage with WBL divisions
- **Workstream 3** – IDI analysis
- **Workstream 4** – Existing research scan
- **Workstream 5** – Interviews
- **Workstream 6** – Opportunity sizing
- **Workstream 7** – Final reporting

Workstream 1: Scope and design

A kick-off meeting was held with Te Pūkenga to confirm the scope, design and workplan for the project. We established a steering group comprised of representatives from (in alphabetical order):

- BCITO (Greg Durkin)
- Careerforce (Paul Williams)
- EarnLearn/Connexis (s 9(2)(a))
- MITO s 9(2)(a)
- Primary ITO (Simon Croom)
- Te Pūkenga (Warwick Pitts, s 9(2)(a))
- Scarlatti (Adam Barker, Trudie Walters, Hannah Binnie).

This steering group met fortnightly over the duration of the project.

Workstream 2: Engage with WBL divisions

We worked with Te Pūkenga to engage with the WBL divisions. We sought steering group input into the project scope and design. The following selection criteria for study participants were agreed:

In scope

- Ākonga who withdrew from 1 September 2022 to 31 August 2023
- Ākonga who had stopped their training entirely

Out of scope

- Ākonga who withdrew from their apprenticeship on or before 31 August 2022, and trainees
- Ākonga who had paused their training with the intention of resuming at some future point

After discussions, the decision was made not to set criteria for the number of credits completed.

Ethics approval was gained (via both our internal Scarlatti ethics committee and Te Pūkenga processes) to conduct interviews with ākonga.

Workstream 3: IDI analysis

A quantitative analysis was undertaken using the Stats NZ Integrated Data Infrastructure (IDI)[1]. The key objective of this IDI analysis was to determine what individuals are doing when they withdraw (particularly in that first year). Are they:

- Still working with the same employer (and just no longer enrolled in an apprenticeship)
- Working for a different employer in the same or similar industry
- Working in a different industry
- Working for themselves (self-employed)
- Going overseas
- Going onto a benefit or are unemployed
- Other/unknown.

We took a cohort of individuals that withdrew at some point in their apprenticeship (e.g. withdrawals from January or June 2021) to see what they were doing one year later (e.g. in January or June 2022). The aim was to put numbers and percentages against each of the different pathways listed above.

This analysis was first broken down by the priority learner groups (Māori, Pasifika, women and disabled people), and then by key characteristics (where numbers were large enough to do so), including:

- Industry
- Demographics (age, gender, ethnicity, disability)
- Academic history (did they finish school)
- Socio-economic status
- Region.

A dashboard was constructed as an interactive visualisation of the IDI data.

Workstream 4: Existing research scan

The purpose of this scan was to determine what research already exists as a starting point for this work (i.e. ensuring this work *built on* existing findings rather than repeating it).

[1] The IDI is a large research database. It holds de-identified microdata about people and households. The data is about life events like education, income, benefits, migration, justice, and health. It comes from government agencies, Stats NZ surveys and non-government organisations. The data is linked together, or integrated, to form the IDI.

External research

This was not a full literature review, but a scan of the grey literature, academic research and research carried out by/for WBL divisions. Our areas of interest were apprentice withdrawal, non-completion and retention, but we also scanned the wider vocational education and training sector to identify other relevant work.

Internal research/knowledge

As part of the research scan, we engaged with field team experts within the WBL divisions. We held a series of individual conversations and focus groups to draw out their expertise – this was valuable information generally not captured in any internal research reports or external grey literature. We also asked about any existing research and retention strategies being used, and levels of success achieved.

Consolidation and theming

We consolidated the findings of this research into themes and sought feedback from the steering group. This document informed the development of the interview guide and was used as the analytic framework for the analysis of interview material.

Workstream 5: Interviews

Sampling

WBL divisions provided Scarlatti with a database of withdrawn ākonga who met the inclusion criteria.

It is important to note that while this study did not seek to generalise the findings (and therefore did not require a statistically representative sample), we nevertheless sought representation across all sectors within the WBL divisions and this was reflected in the weighted batch selections (**Table 2**). Batches of 50–250 ākonga per WBL division were generated and sent recruitment emails at weekly intervals.

Table 2: Example of weighting calculations applied to sectors within WBL divisions (here, Careerforce)

Industry sector	Total	Weighted total for batch
Aged Residential Care	473	18
Disability Support	194	7
Healthcare Services	99	4
Home and Community Care	104	4
Mental Health and Addiction Support	234	9
Social Services	102	4
Youth Work	114	4
Others	11	
TOTAL	**1331**	**50**

We also wanted to ensure we had sufficient representation of Te Pūkenga's priority ākonga groups (women, Māori, Pasifika and disabled learners). We monitored responses from these groups and adjusted the number of emails sent each week as necessary (**Table 3**).

Table 3: Number of recruitment emails sent to priority ākonga groups by WBL division

WBL division	No. withdrawn	Total emails sent	Sent to disabled	Sent to Māori	Sent to Pasifika	Sent to women
BCITO	5641	850	60	180	120	60
Careerforce	1331	375	20	120	50	50
Connexis	545	250	14	80	40	11
EarnLearn	1514	100	0	40	12	20
MITO	718	250	30	60	30	48
Primary ITO	2049	475	40	125	50	60
TOTALS	**11798**	**2300**	**164**	**605**	**302**	**249**

Participant recruitment

Each weekly batch of ākonga were sent a direct email inviting them to speak with us. A $50 Prezzee gift voucher incentive was offered. WBL divisions could choose to send out an advance communication to let their ākonga know they may be contacted by us on behalf of Te Pūkenga.

A link in the email directed them to a registration page with information about the project (**Appendix 1**: Recruitment email and), at which point they could choose to participate and enter their contact details. Participants could indicate whether they preferred to be interviewed by a Māori interviewer, Pasifika interviewer or an interviewer of any ethnicity. Our response rate (i.e. number of people completing the registration form) was 5.7 percent.

Within two weeks of recruitment beginning, it became apparent that response rates for Pasifika ākonga were lower than for other priority ākonga groups. Following discussions with the Pasifika interviewer a talanoa approach to recruitment and data collection was adopted.

Talanoa

Talanoa is an unstructured discussion process used in the Samoan, Tongan and Fijian cultures. In the Talanoa process, the focus is on developing relationships between people and is a process "where people story their issues, their realities and aspirations, [that] allows more *mo'oni* (pure, real, authentic) information to be available for Pacific research than data derived from other research methods"[2].

Within this framework, *talanoa* as a research tool, is a conversation, a discussion, an exchange of ideas, or thinking together, that can be formal or informal in nature. It is almost always carried out face-to-face. *Talanoa* on one level means 'talking about nothing in particular' without a necessarily prescribed framework for the discussion; or it may mean a personal encounter where people story their issues, their realities and their aspirations. It is a skill that is embedded in values and attitude. The context of talanoa sets the knowledge, values and attitude.

Importantly, talanoa is not just about the 'talk' of participants; it is also about the way that the talanoa is set up and analysed *for* research purposes, such as the framing of the interview data. There is no preconceived agenda. It is very open. One is free to tell his or her story about what is important to him or her, and what makes him or her feel good, happy and sad.[3]

[2] Vaioleti, T.M. (2006). Talanoa Research Methodology: A Developing Position on Pacific Research. *Waikato Journal of Education* (1), pp. 21-34

[3] Halapua, S. (2007). Talanoa: Talking from the heart. Interview, *SGI Quarterly* 1, pp. 9-10.

Importantly, as part of the talanoa approach, a verbal 'reporting back' is held with each participant at the completion of the research. This helps to honour and respect their voices, their brave vulnerability and their stories shared with the hope of making a positive difference to all involved.

Data collection

An interview guide was developed and iterated with the steering group and the Māori and Pasifika interviewers (see **Appendix 2**: Interview guide).

The majority of interviews were carried out via phone call, with 13 opting for a video (Teams or Zoom) call and 7 in-person talanoa. Interviews with Māori and Pasifika ākonga were carried out by experienced Māori and Pasifika researchers known to Scarlatti or recommended by the steering group.

A total of 98 in-depth semi-structured interviews lasting between 8 and 68 minutes (average length 18 minutes) were carried out with ākonga who had withdrawn from their apprenticeship. The in-person talanoa with Pasifika ākonga in Auckland ranged from 40 to 75 minutes long.

Interviews were recorded with permission. They were immediately de-identified and securely stored in SharePoint, accessible only to the Scarlatti research team on password-protected computers. Comprehensive notes and direct quotes were taken and uploaded to Delve, a qualitative data analysis software package.

Data analysis

Thematic analysis was carried out immediately following each interview. The four researchers initially coded their own interviews deductively using the subcategories from the literature scan as the analytic framework. We then coded inductively within the broader or more complex subcategories (e.g. delivery and assessment, employer support) to provide a deeper and more nuanced understanding.

The researchers met throughout the data collection and analysis phase as a form of triangulation, ensuring that coding was both rigorous and consistent across and within the research team. Interviews were anonymised and illustrative quotes are used in this report to support the findings.

Participant demographics

The percentages of disabled (7%), Māori (23%) and Pasifika interviewees (10%) are in line with the cohort of apprentices who withdrew in 2021 (8%, 21% and 7% respectively). The percentage of women interviewees was significantly higher than the 2021 cohort (40% percent compared to 24%) (**Table 4**).

Table 4: Breakdown of interviewees by WBL division and priority learner group

WBL division	No. withdrawn	Emails sent	Interviewed	Disabled	Māori	Pasifika	Women
BCITO	5641	850	29ll	1	7	4	11
Careerforce	1331	375	23	3	2	3	14
Connexis	545	250	9	0	4	1	1
EarnLearn	1514	100	9	0	3	1	3
MITO	718	250	8	1	2	0	2
Primary ITO	2049	475	27	2	6	2	12
TOTALS	11798	2300	105	7	24	11	43
Percent				7	23	10	41

The percentage of interviewees aged 40 and over was slightly higher than for the cohort of apprentices who withdrew in 2021 (**Table 5**), but the representation across ages was broadly similar.

Table 5: Age breakdown of interviewees compared to 2021 cohort of withdrawals

Age	No. of interviewees	Percent of interviewees	Percent of 2021 withdrawals
Under 25	40	38	41
25-39	44	42	43
40 and over	21	20	16

The breakdown of interviewees' duration of enrolment (by years completed) also maps well to the overall population of withdrawn apprentices (**Table 6**).

Table 6: Duration of enrolment for interviewees compared to overall withdrawals

Duration of enrolment (full years completed)	No. of interviewees	Percent of interviewees	Percent of withdrawals
0 years	38	36	28
1 year	38	36	35
2 years	23	22	17
3 years	5	5	9
4+ years	1	1	12

The post-apprenticeship destinations are a little different to the cohort of apprentices who withdrew in 2021. Fewer interviewees had remained with the same enterprise, and more had moved into a new industry, were studying, or were on a benefit (**Table 7**).

Table 7: Post-apprenticeship destinations of interviewees compared to 2021 cohort of withdrawals

Destination	No. of interviewees	Percent of interviewees	Percent of 2021 withdrawals
Working for same enterprise	30	29	40
Working in same/similar industry	22	21	21
Working in a different industry	27	26	21
Studying	7	7	1
Self-employed	4	4	3
Overseas	4	4	3
Benefit	8	8	4
Other	2	2	8
No response	1	1	

Limitations

The in-person talanoa option for Pasifika ākonga was only available to those residing in Auckland. This could be perceived as a limitation of the study as representation from those living in other locations was not able to be gained. However, by adopting this approach we gained seven more Pasifika

participants than would have been possible otherwise. This enabled us to achieve 10% representation which reflects the percentage of Pasifika withdrawals seen in the WBL divisions' databases.

Workstream 6: Opportunity sizing

The information from the IDI analysis and interviews was synthesised and used to develop key insights and recommendations. These in turn were used to design interventions that we subsequently sized and created some scenario modelling for.

Workstream 7: Final reporting

A draft final report was presented to the steering group, and their feedback was then incorporated. We also created three one-page infographics for Te Pūkenga and participating WBL divisions.

Part 1: Apprentice attrition findings

Overview

This section explores trends over time in apprentice enrolments and withdrawals. It aims to provide some context and indication of which apprentices are withdrawing, when, and where they go after they withdraw.

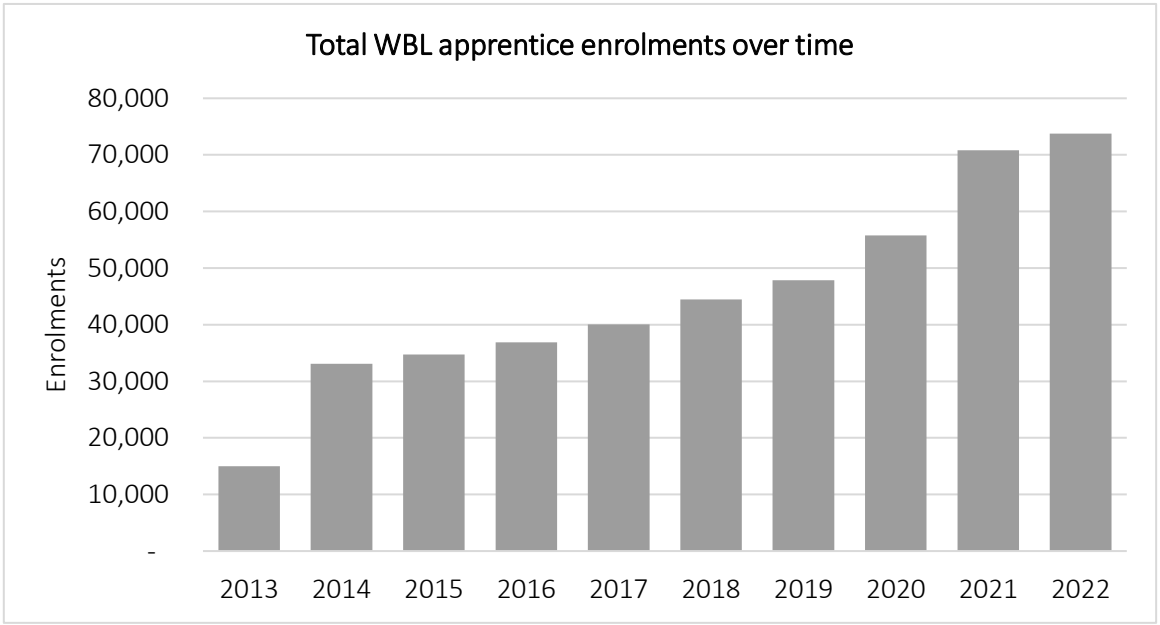
Things to be aware of when reading this section:

- Multiple data sources are drawn on, depending on availability of data and information. This includes the Stats NZ IDI, Ngā Kete and Education Counts[4].
- There is some variation in how apprentice withdrawals and other key measures are defined, particularly between data sources. This is primarily due to apprentice transience – flowing between employers, between WBL divisions, and in turn being withdrawn and re-enrolled several times, sometimes even within the same year.
- The scope of apprentices included in this section include work-based apprentices enrolled in the nine WBL divisions of Te Pūkenga.

Enrolment trends over time

Figure 2 shows the number of work-based apprentices enrolled over time. Enrolments increased by 55% between 2019 and 2022 (from 48,000 in 2019 to 74,000 in 2022). This is largely attributed to the introduction of the Apprenticeship Boost scheme in August 2020. Note that enrolments have decreased again in 2023 (data point as at Nov 2023).

Figure 2: WBL apprentice enrolments (Ngā Kete)



[4] https://www.educationcounts.govt.nz/statistics/new-zealands-workplace-based-learners

Withdrawal trends over time

Withdrawals as a proportion of enrolments

Here, we break down the annual enrolment numbers by those who enter within the year, those who withdraw, complete, and those that continue on. A new entry is defined as one who begins a New Zealand Apprenticeship for the first time. A withdrawal is defined as someone who leaves the system without re-enrolling in another NZA again later on.

The number of withdrawals increased considerably between 2019 (~5,000 withdrawals) and 2022 (~14,000 withdrawals) (**Figure 3**). The number of new entrants increased in 2020 and 2021, but decreased again in 2022. Withdrawals as a percentage of the annual cohort have almost doubled, from 10% in 2019 to 19% in 2022 (**Figure 4**).

Figure 3: Apprentice cohort composition over time (Education counts)

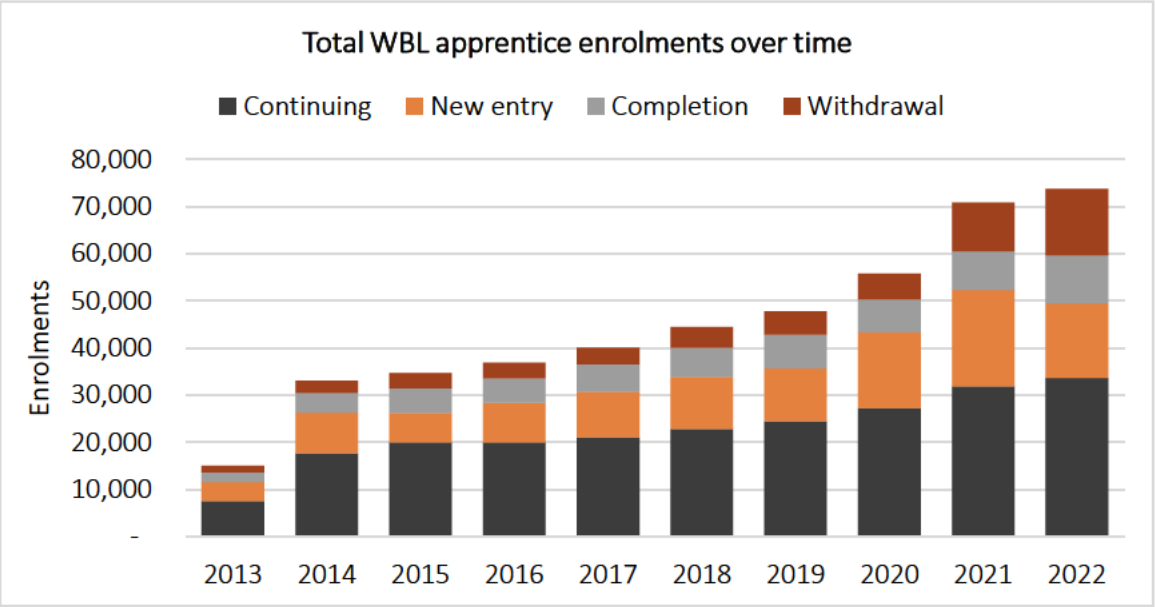
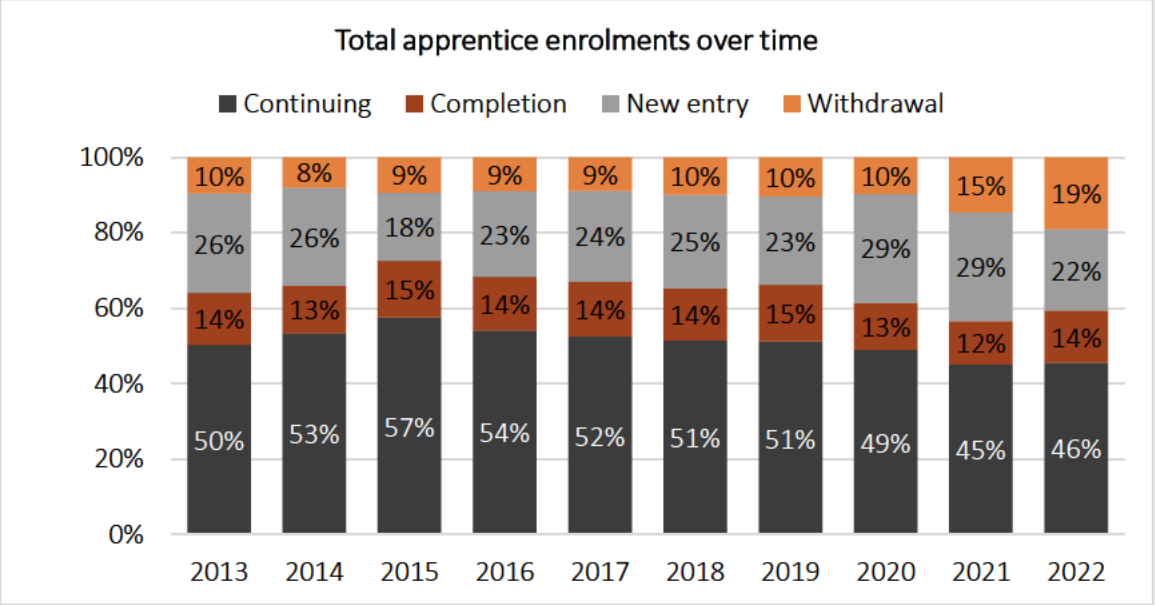


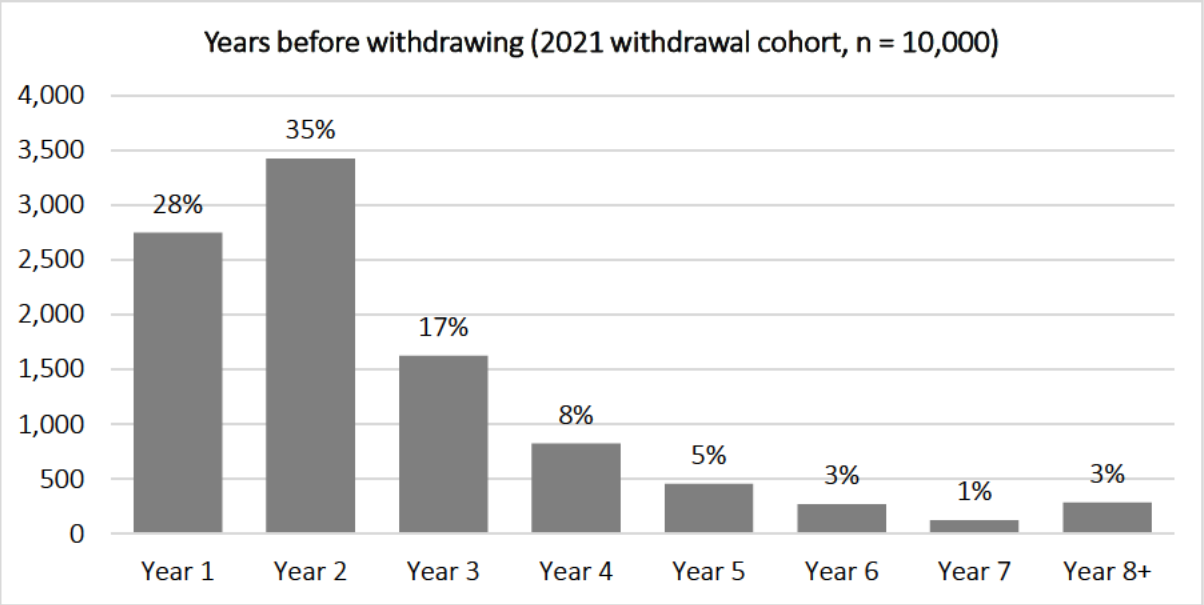
Figure 4: Apprentice cohort composition over time (Education Counts)



Full enrolled years before withdrawing

Figure 5 shows the time enrolled in an apprenticeship before formally withdrawing, for the cohort of withdrawers in 2021 (approximately 10,000 as shown in **Figure 3**). We see that 28% of withdrawers in 2021 had been in their first year of the apprenticeship. A further 35% withdrew in their second year. This implies that the first and second years of an apprenticeship are crucial in ensuring apprentices complete their qualifications successfully.

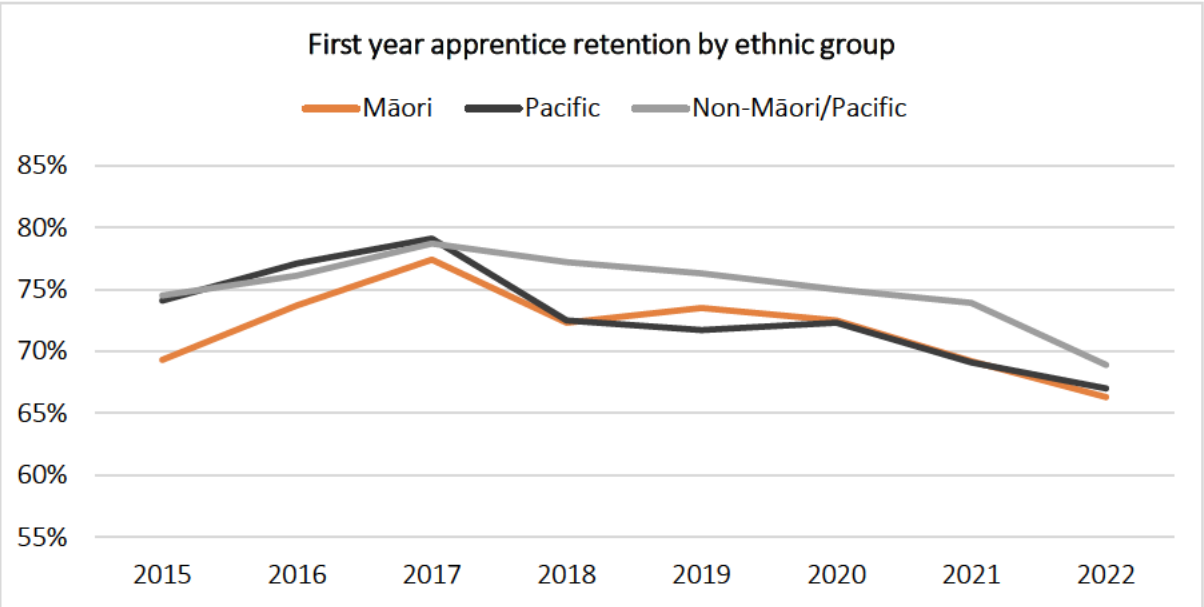
Figure 5: Full enrolled years prior to withdrawing (Stats NZ IDI)



First-year retention rates

Figure 6 shows the first-year retention rate over time, by key ethnic groups. We see that across all groups, retention rates have been declining – particularly in the last few years. Retention rates of Māori and Pasifika ākonga are also notably lower than that of non-Māori and non-Pasifika.

Figure 6: First year apprentice retention by ethnic group (Ngā Kete)



Destinations of withdrawn apprentices

Destinations over time

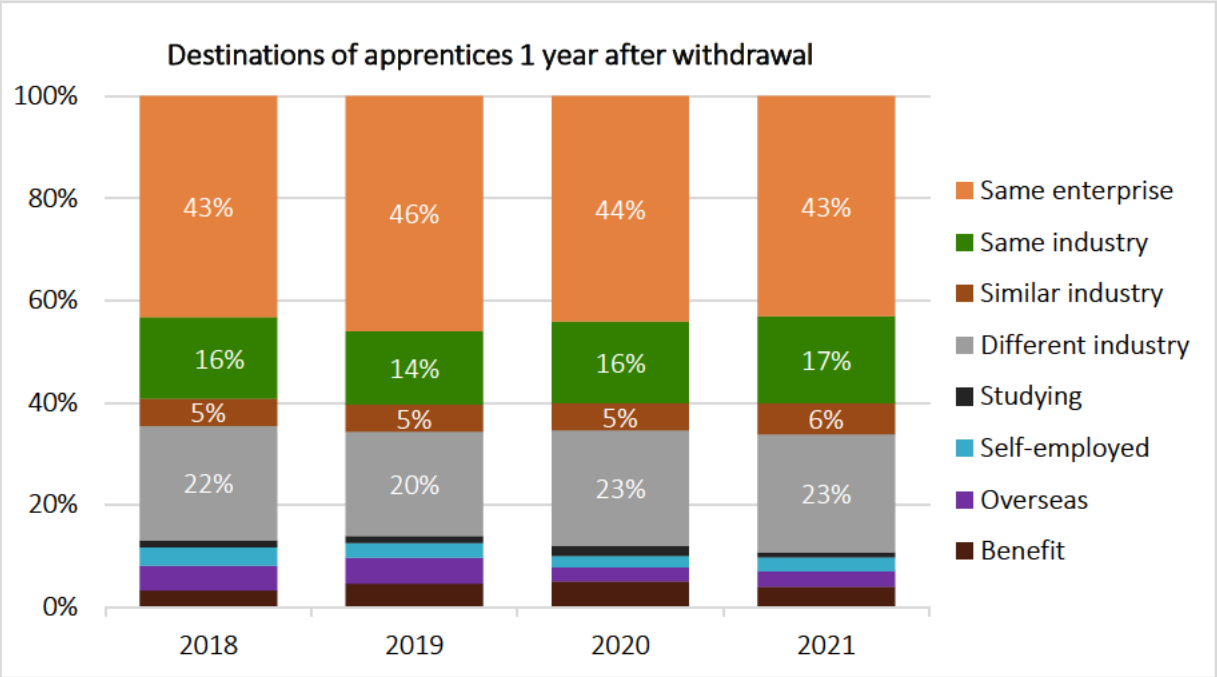
The final question is what happens to apprentices once they withdraw – where do they go? Using the Stats NZ IDI, we investigated what individuals were doing 12 months after their formal withdrawal date from their apprenticeship. **Figure 7** shows the destinations of withdrawn apprentices between 2018 and 2021.

Of particular interest is that the broad destinations of withdrawn apprentices do not appear to have changed in the last four years. This suggests that although withdrawal numbers have increased, the reasons for withdrawing have not changed.

We observe that:

- More than **40% of withdrawn apprentices are still working at the same enterprise** 12 months after withdrawing
- About 23% are in the same/similar industry (but with a different enterprise)
- 23% are in a completely different industry.

Figure 7: Destinations of withdrawals 2018-2021 (Stats NZ IDI)

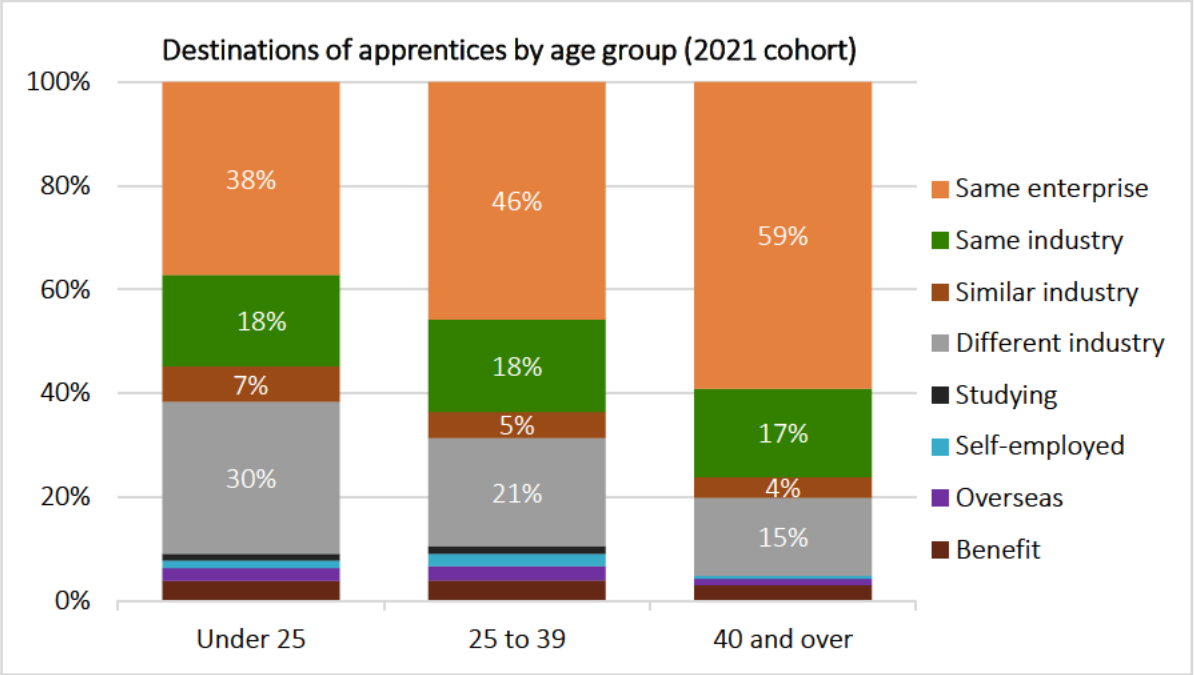


Variation in destinations between groups

It is also of interest to explore which factors may be associated with particular destinations. **Figure 8** shows the breakdown of destinations by age group, for a cohort withdrawn in 2021. We see that:

- Those aged 40 and over are more likely to remain with the same enterprise (59%).
- Those aged under 25 are more likely to go to a completely different industry (30%). This is not unexpected – younger people typically have lower industry retention.

Figure 8: Destination of withdrawn apprentices by age group (Stats NZ IDI)



Interestingly, there are no noticeable differences in destinations between female and male apprentices, or between those with or without a disclosed disability. Note however that this is at a broad system level, and further investigation is needed to tease out differences between WBL divisions.

An interactive dashboard has been developed to explore the differences in apprentice retention and their destinations. This dashboard can be accessed here: Apprentice retention dashboard

Apprentice retention findings summary

- Apprentice enrolments increased considerably between 2019 and 2022. Over this period, withdrawal rates also increased (almost doubling).
- The majority of withdrawals occur in the first or second year of an apprenticeship.
- The destinations of withdrawn apprentices have remained relatively constant over the last four years. This suggests that the issues now are the same as they were at least four years ago (and are now magnified).
- More than 40% of withdrawn apprentices are still with the same employer 12 months later. Almost another 20% are still in the same industry. This suggests that it is not the job that is the problem – but rather something about the apprenticeship training programme which has led them to withdraw. This is even more so for older apprentices.

Part 2: Literature scan findings

Overview

This literature scan was undertaken to gain an understanding of the issues facing apprentices engaged in vocational education training. This is a scan rather than a comprehensive systematic review, as the purpose was to identify key themes related to apprentice withdrawals.

The literature includes research reports and academic articles that could be sourced electronically or from government agencies/WBL divisions about apprentice withdrawal and retention, with a special focus on research about priority ākonga. It has been limited to material published in the last 10 years, and includes research from Aotearoa New Zealand, Australia, the United Kingdom and Germany. The research includes the perspectives of employers, apprentices, government agencies and researchers.

Of the 17 studies in this scan, around half of them (8) are from Aotearoa New Zealand. However, much of it is more than 5 years old and therefore may not reflect the current context of increasing enrolments and declining retention rates. Furthermore, studies commonly asked for the 'main' reason for withdrawing from an apprenticeship, whereas the reality is likely to be more complex.

To that end, we also conducted individual online discussions and focus groups with members of the project steering group and WBL division field teams. The purpose was to gain a current, boots-on-the-ground perspective. We were interested in what they had observed about apprentice withdrawals, what retention strategies were in place and what success they had seen. Their comments have been included in the themes alongside the findings from the literature scan.

Factors that contribute to withdrawal

Alkema (2016) developed a typology of contributing factors that remains relevant today, and we have adopted it as the analytic framework for our theming. She identified three main categories of factors: system level, employment and personal. We discuss each in turn below, further segmenting each category into subcategories.

System level factors

System level factors are those that neither the employer nor the apprentice have control over, such as training wage rates, models of training and assessment, and the economic climate (for example, recessions result in higher rates of redundancy for apprentices). Some system level factors are within the control of WBL divisions (for example, delivery and assessment) while others are not (such as government policy). We begin our discussion with the latter.

Government compliance and immigration policy

Half of the WBL divisions mentioned a relationship between compliance and withdrawal rates. Where ability to do the job does *not* rely on compliance (i.e. they don't need a qualification to be an XYZ) the withdrawal rates are higher. For most sectors with no compliance requirement, completing an apprenticeship does not result in higher pay, it does not affect their job in any way, meaning they can withdraw as there is little perceived benefit.

Changes in immigration requirements have also impacted on apprentice withdrawals in some sectors. For example, the Primary ITO team have noticed that changes in rules around who employers can employ and what hourly rate they need to pay means they have not been able to employ as many

immigrants. This in turn has meant they are not fully staffed so don't have the capacity to take on an apprentice: either they don't have anyone to manage the apprentice and/or they are unable to take on an inexperienced worker. Previously, Immigration NZ mandated L4 qualification so immigrants would complete an apprenticeship to get residency. However, this is no longer the case and where there is no requirement to get a qualification, there is no incentive to sign up to an apprenticeship.

Government incentives

Apprenticeship Boost and the Targeted Trades and Apprenticeship Fund (TTAF) were mentioned by more than one WBL division as having a significant impact on apprentice withdrawals – yet initially they resulted in a surge of enrolments.

The Apprenticeship Boost programme was introduced in August 2020. It is administered by Work and Income NZ and paid directly to employers to encourage them keep and take on new apprentices. The payment is currently $500 per month per apprentice for a maximum of 24 months, however prior to 5 August 2022 the payment was $1000 per month per apprentice. The programme has been extended until the end of December 2024.

One member of the Primary ITO focus group noted that her team has withdrawn 1000 or more apprentices in the last year. This was mostly due to employers taking on apprentices under Apprenticeship Boost when the learners should have been in a different programme (i.e. they weren't suited to an apprenticeship). She said they used to use be able to use the L2 qualification to screen the learners entering L3 but were unable to do this with Apprenticeship Boost.

Careerforce also noticed an uptick in apprentice enrolments and were concerned about a lower quality of enrolments driven by the wrong incentives (i.e. seeking financial rather than upskilling benefit). They believed this would lead to future inflated levels of withdrawals, which does seem to have occurred.

The Targeted Trades and Apprenticeship Fund (TTAF or free trades training scheme) was introduced in July 2020, covering ākonga fees until 31 December 2022. At that point, fees were reintroduced. For most ākonga training under the TTAF, fees were then apportioned based on the portion of the course that occurred before the end date – they were then responsible for paying the residual balance, if they were not eligible for the Fees Free scheme.

The Connexis team noted that 99% of their apprenticeship programmes are paid by the learner's employer. Connexis experienced a spike in withdrawals in Q1 2023 due to employers deciding to withdraw their learners due to poor progression and employers not being prepared to commence paying for their learners after the end of TTAF in Dec 2022. The Connexis 2023 fee payment structure is payment in full upon enrolling.

Low wages

Low wages have not been cited in the literature as a significant reason for withdrawal in Aotearoa New Zealand in the past, however this appears to have changed recently. A recent Te Pūkenga survey (2022) of apprentices still in training (i.e. not withdrawn) found that over 60% felt that employers could improve pay and benefits.

A number of the WBL experts had observed apprentices leaving because they had been offered a better paying and/or full-time job. This is likely driven by current low levels of unemployment in Aotearoa New Zealand and increasing competition for workers. This has (in some sectors at least) resulted in favourable wage conditions for those capable of switching jobs and/or sectors.

There were many occasions where apprentices were offered leadership roles within the same company, meaning that completing their apprenticeship was seen as unnecessary. Some WBL divisions have seen apprentices moving to Australia, although they could not say with certainty that higher wages were a driver.

Natural disasters

In 2023, the natural disasters across the North Island have had flow-on effects for apprenticeships. The cyclones and flooding have caused significant upheaval in both personal and work life due to the devastation, trauma and/or significantly increased workloads. This has led to withdrawals beyond the control of the WBL, employer or apprentice.

Delivery and assessment

In regard to training and assessment, apprenticeships often require a self-directed approach to completing study modules. This may not suit all learners, and when combined with complex or hard to access training and assessment materials, may be a barrier to completion. Two separate studies (in 2013 and 2014) found that this was particularly true for Māori and Pasifika apprentices.

WBL division field teams also raised the mode of assessment and submission, although there were conflicting views. Some observed that having to complete paper-based workbooks was intimidating for many second chance learners. Others identified access to technology as problematic for a group of learners, who then struggle to complete online assessments; for them, paper-based options are preferred. The ability to choose the mode of assessment and submission would help to alleviate this factor.

Training Advisor (TA) support

The Te Pūkenga survey found that having a supportive and accessible Training Advisor (TA, or similarly named role) had a significant influence on apprentice satisfaction, but that the level of support and accessibility varied across the WBL divisions. More kanohi ki te kanohi (face to face) learning opportunities were also identified as important.

The same survey found that over half of the respondents had received learning support, and 90% of those reported that it helped them. The support ranged from peer support (20.3%) and study hubs (18.9%) to industry mentors (16.1%) and help with reading, writing and maths (11.3%). Nine percent had received support around computer and internet skills.

Cultural responsiveness

This points to another contributing system level factor within training and assessment: the lack of use of culturally responsive pedagogies and TA proficiency in te ao Māori. The Tokona Te Raki report (2019) recommends that for Māori learner success, it is important to take a cultural lens to assessment as this can facilitate the design of appropriate individual interventions. Indeed, a Skills Organisation pilot that implemented culturally appropriate relational mentoring achieved outstanding retention rates with Māori and Pasifika apprentices. The Te Whare Tapa Whā and Fonofale models could be used as appropriate frameworks to holistically address the needs of Māori and Pasifika ākonga (Appendix 3: The relevance of the Fonofale model).

Two further cultural points that came to light were around names. First, when apprentices' names are mispronounced or no effort is made to pronounce them correctly, this can leave the apprentice feeling detached and not valued. Second is the inability for ākonga to be known by their preferred name. This was especially the case for apprentices from certain countries with non-Anglicised name formats, those

who are trans, separated, or are known by their middle name or any other name. While it may seem superficial, these factors can be like a dripping tap that wears the apprentice down – and indeed for some they can be triggering. Taking care over pronunciation and having a more flexible system that recognises that a person's legal name is not necessarily the name they wish to use would be beneficial.

Employment factors

These are factors over which the employers have control, and include relationships, working conditions, workplace culture, the quality of on-the-job training, and employers' attitudes to training. These factors contribute the most to apprentices' decision to withdraw.

Employer support

A supportive employer who models good work practices and work ethic, and the provision of pastoral care, is important for retaining apprentices – especially for Māori and Pasifika learners.

There is evidence from both the literature and the field teams that larger employers with more experience and formalised structures for training are more likely to have lower attrition rates. Smaller or more specialised employers may also not be able to provide experience necessary for all practical requirements of the qualification within their regular scope of work.

The 2022 Te Pūkenga survey of apprentices found that 10 percent of respondents had not been allowed to attend off-site training, with almost half saying it was because the employer had too much work and could not let any workers go. This finding was echoed by the WBL division field teams.

In addition, some employers do not have suitable staff available to provide sign-off for assessments: apprentices being given the opportunity to video themselves completing the task may be an intervention worth investigating. Other employers do not allow time during the work week to train/study, and in some situations permission to use a work computer to complete assessments may be revoked after a change in middle management.

Workplace culture and conditions

Interestingly, an Australian study found that workplace issues such as bullying, poor work conditions, hours being cut or extended, or a 'bad boss' were problems for apprentices who remained *as well as* for those who withdrew. However, levels of satisfaction with their apprenticeship differed between the two groups. This suggests that system level and/or personal factors play a compounding role in individuals' decisions to stay or go in these situations.

When asked, WBL division field teams said they did not believe workplace culture or conditions were significant factors in apprentices' decision to withdraw.

Wages

Wages, although generally a system level issue, also constitute an employment factor in situations where apprentices believe they are being used by the employer as 'cheap labour'. There is no suggestion from the literature or the WBL division experts that this is a factor in Aotearoa New Zealand – either historically or currently.

Training costs

The cost of course fees and equipment have not been identified as a contributing factor in apprentice withdrawal in Aotearoa New Zealand in previous studies, however as noted above, WBL division experts

believe the withdrawal of the TTAF scheme has had a significant impact. They have also observed that when money gets tight for employers, training is a luxury that gets cut.

Compliance requirements

There are some sector-specific employment factors at play in apprentice withdrawals in Aotearoa New Zealand. For example, in some sectors it might be a contractual requirement for the supplier company to have all employees qualified or enrolled in a qualification. If an apprentice leaves that employer and their new employer does not have that requirement (and they were not motivated to continue with the apprenticeship) they may withdraw.

Similarly, within processing particularly, the loss of an employer's export licence/certification often results in staff losing their jobs – including apprentices.

Lastly, failing a drug/alcohol test results in immediate withdrawal in many sectors, but it is unclear what proportion of apprentices this affects.

Personal factors

These include age, gender, ethnicity, personal circumstances, prior education level, literacy, numeracy, and employability skill levels, motivation, persistence and attitude. These individual factors on their own are unlikely to contribute to non-completion; rather these factors are likely to interact with each other and with the employment and system factors.

Balancing the dream with reality

Younger people are more likely to withdraw as they want to explore different opportunities – they may find that the industry doesn't suit them, that they don't have the ability to study while working, or that they are looking for better work-life balance.

The Te Pūkenga (2022) survey of current apprentices found that just over 27% of respondents did not have all the information they required at the start of their apprenticeship (such as resources, study times, equipment and assessments). More than 60% indicated they were unaware of the time commitment they would need to dedicate to study and assessment over and above their working hours.

The WBL division experts noted that many apprentices find managing the demands of study in their own time while working a full-time job difficult. This is often exacerbated by travelling for work and/or working very long hours as is the case in some sectors. Some apprentices are working a second job to pay the bills, which further compounds the lack of work-life balance. The WBL division experts believe that while the thought of training might be very appealing, and the TAs 'sell' it very well, the reality can be very different.

For some ākonga who have just left high school and entered their first job, being 'work-ready' is proving a challenge. Some WBL division field teams have heard concerns from employers around being at work on time, being at work every day, not being able to take feedback, and an inability to retain information. Others have observed a generational gap, with (older) employers being less sympathetic or understanding of GenZ – they are trying to run a business and have little time or patience to 'babysit' and are not necessarily well-equipped to deal with mental health issues or wellbeing issues. One WBL division expert suggested that Te Pūkenga could provide courses in how to understand and support young people.

There is also a sense amongst some WBL division experts that many young ākonga are seeking instant gratification: there is little ability to persevere, and they lack a long-term vision or recognition of the

natural ups and downs of life and therefore they withdraw at the first hurdle. The length of an apprenticeship is beyond them to perceive. This is evidenced by the high number of withdrawals that occur at the completion of L3 when they are at the halfway point – the ākonga have realised that 25 workbooks is a big load, or that it has taken them 30 months to complete a 20 month L3, and that they do not wish to do the same again to complete L4.

One possible intervention would be to bundle the modules into a series of micro-credentials so they gain some rewards and qualifications along the journey. For sectors that have a lot of older apprentices who are returning to the workforce after having children, or after the children have left home, a noticeable barrier is being able to *use* the online learning platform to complete the assessments.

Change in personal circumstances

While personal circumstances are amongst the most commonly cited reason for withdrawal, this finding is mostly from research with employers rather than apprentices and therefore our understanding of what constitutes personal circumstances is limited. In the research with apprentices, they note health, relationship problems, bereavement, moving towns or changed family demands among the reasons for their withdrawal – and there is evidence from Aotearoa New Zealand that (in 2016 at least) around a third of them felt that, had they had some form of support, they would have remained in training. The WBL division experts we spoke to mentioned changes in personal circumstances in broad terms, although moving to Australia was one specific example raised.

Literacy and numeracy

This is a significant factor in withdrawals. This is especially the case for many apprentices with little educational background or prior experience of effective learning, such as people who did not 'do well' at school, however it is also true for migrants with English as a second language. This may have a flow-on effect for ākonga confidence in being able to understand and respond to training requirements in workbooks. As noted above, completing paper-based workbooks may be intimidating for apprentices with these challenges, and not all TAs have the ability to identify this or provide solutions.

A recent Connexis intervention (started in August 2023) provides support through diagnosis followed by a range of options to address the gaps. They will monitor the impact of this intervention. Relatedly, for some apprentices it is about capability – they are supported by their TA to complete L3 but aren't ready to make the step up to L4.

Transience

For long duration apprenticeships (for example, the agriculture complex apprenticeship is 40 months) life frequently changes partway through, or commitments change. Those working in dairying in particular are also a transient group of people – come 1 June they often change farms. Younger apprentices often don't ask whether new employer will be prepared to support their training, they have no experience in negotiation. While their TA will meet with them and their employer and ask what their plans are for June, the apprentice will usually just say 'I'm staying on' because they don't want their employer to know they are looking/have secured another job. When that happens, the TA is unable to help them negotiate a continuation of their apprenticeship.

Gender

A study of women tradespeople found that personal factors (their individual resources and attributes) contributed to remaining in male-dominated industries despite system level and employer factors that were less than favourable. The acquisition of social and cultural capital was pivotal in their success, and

can be incorporated into industry training programmes. Having good role models in the trade and a longer-standing interest in being a tradesperson were also important predictors of retention for younger apprentices in another Australian study.

Existing WBL division research

BCITO and Careerforce gave us access to some of their internal research on apprentice withdrawals, and we have distilled this into an overview of relevant information.

BCITO

BCITO has been conducting monthly surveys of apprentices (both current and withdrawn) for a number of years. We carried out a high-level analysis of reasons given for withdrawing by ākonga in 2022–2023. As the responses were generally brief, we were only able to use the three overarching categories for coding. We excluded responses such as 'left job' and 'different job' as these are destinations and therefore do not provide insights into the underlying 'why'. From the 130 responses, we found that:

- 32% of reasons were related to system level factors
- 28% mentioned employment factors
- 40% withdrew citing personal factors

Careerforce

Careerforce also conducts monthly surveys of graduates and withdrawn ākonga. They provided us with their first report (from 2022), which found that:

- 29% of ākonga made their own decision to withdraw
- Careerforce made the decision for 37% of ākonga due to inactivity
- Employers withdrew 20% of ākonga (generally because they were no longer working there)
- Of those who made their own decision to leave (some chose more than one reason):
    - Up to 21% mentioned Careerforce-related reasons for leaving
    - 15% cited employment factors
    - 76% withdrew for personal reasons
- It is important to note that one of the options under 'personal reasons' was having changed career/no longer working in that industry – we do not know what the underlying driver for this was (e.g. better pay elsewhere, better conditions elsewhere) meaning that the 76% who withdrew for personal reasons may be a little high

Retention strategies

All WBL divisions are monitoring retention. There are a variety of formal and informal strategies in place: some WBL divisions have implemented strategies to address retention challenges quite recently, some have been doing it for longer, while others are more ad hoc/reactive and intermittent.

BCITO

BCITO conduct a withdrawal survey each month, and have been doing this for a number of years. They have identified a difference by ethnicity and have a Māori retention strategy in place, but note it is late in the learner journey. If they see that an apprentice is not progressing as anticipated they will ask the TA to get in touch – there is a framework to support both the TA and the apprentice. But ideally, they would like to be more proactive and reach them before they begin having difficulty.

Careerforce

The focus for Careerforce is on communication with ākonga to keep them engaged. They send out a bimonthly newsletter, run in-person wānanga and 'Achieve' sessions, and note that their apprentice advisers/coordinators should be contacting apprentices quarterly. They also have a closed Facebook group for apprentices.

Careerforce also conduct longitudinal graduate and withdrawal surveys (with invitations sent the month following). They have had 6,500 responses to the graduate survey ('what worked') and 1,500 responses to the withdrawal survey ('what didn't'). Additionally, they compile regular Apprenticeship Evaluation reports, which pull data from multiple sources (TNA, end of module surveys via e-learning platform) and develop a series of recommendations from each of these reports.

Some apprentices find it isolating if they are alone within their workplace. To overcome this, Careerforce Apprentice Advisors try to maintain contact more frequently than their mandated quarterly requirement – they also offer workshops/hui both online and in person, which enables them to see who is struggling.

Connexis/EarnLearn

Until recently, Connexis/EarnLearn have had no strategies in place to actively address retention. However, they recognise that for many of their apprentices self-directed learning after hours is difficult, so In August they initiated a learner network group. This is a pilot scheme in Christchurch, held monthly for 2 hours. Connexis provides food and it is run like a study session, where ākonga can ask questions and get help with assessments. They believe this will help to develop a sense of community, especially for apprentices who are the only ones in their workplace, and are looking forward to monitoring the results.

MITO

MITO have adopted a "high touch-point model" of learner support. They have mentors from industry, TAs (minimum 4x year face to face contact), employer support, Māori and Pasifika mentors, dyslexia mentors for learning disabilities, and contract out to Literacy and Numeracy Aotearoa for support. They send out automated CRM emails at 30, 60 and 90 days to learners who have not engaged with the online learning platform. They have an active follow-up system for learners who withdraw due to a change of employer – through this they have clawed back 22 percent of apprentices who withdrew. MITO also do off-job training where TAs are present.

The MITO Brokerage Scheme – which is broader than rescuing terminations – is aimed at filling employer skills gaps. They match registrations of interest learners on their website with employers who are looking for those skills.

Industry standards assessors not only mark the assessments, they also have quite a lot of contact with learners. All assessments are submitted via the online platform. They run study hubs (both in person

and online) over 2–3 days to create a sense of community, however they are not compulsory. These are a refresher of the formalised induction process (they run over the obligations of employer and learner, show them how to log in to the portal, get them to complete the first theory package). They know that if the learner can complete first 10% of credits they are more likely to be able to continue.

There is a weekly night class in central Hawkes Bay, hosted by TA and funded through the Mayor's taskforce for jobs. They hold it straight after work and there is Wi-Fi and pizzas.

MITO have tried to identify and find ways to overcome other barriers to success which lead to withdrawals. For example, they have loan Chromebooks if ākonga don't have access to technology, they provide data cards if ākonga don't have access to Wi-Fi, and they have CPENs (a pen that reads text) available for dyslexic learners.

Primary ITO

Primary ITO has recently embarked on two new initiatives, but did note that until now any work around retention has been reactive and intermittent.

First, they have implemented a 5-question pre-enrolment checklist to try and improve retention. The purpose is to set the scene at the beginning of the apprenticeship, ensuring that all parties are on the same page. The TAs use it with the employer to cover the expectations around progression and the need to provide opportunities for the apprentice to demonstrate their ability across required skills. They also reconfirm the employer understands there are a set number of learning hours, and work to identify any neurodiversity (and other) support needed. The initiative was rolled out in August 2023 but there is a sense that the checklist is working and has been helpful for employers.

Second, they are doing some work to understand comprehension skills etc in order to facilitate appropriate assessment but it is a "slow burn".

Literature scan findings summary

- Using Alkema's (2016) typology of factors that contribute to apprentices' decisions to withdraw is useful for this research and aligns with what we heard in our discussions with WBL division experts.
- While it could be argued that only system level factors are within Te Pūkenga's control, we see from both the WBL division research and retention strategies that there are also some employment and personal factors that Te Pūkenga can influence.
- There are a number of good evidence-based recommendations in the research done to date, which we will seek to build on/leverage off in this project.
- Some WBL divisions have carried out their own research into apprentice withdrawals, although the definitions and methodologies vary.
- Some WBL divisions have well-established, formalised retention strategies while others are just beginning this journey – but all share a desire to improve the ākonga experience.
- There is no one-size-fits-all approach that will allow Te Pūkenga to troubleshoot all reasons for withdrawals, although there are many commonalities across industries and sectors.

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Part 3: Interview findings

Overview

The qualitative interview responses were analysed using the literature scan as the analytic framework. This findings section is therefore structured using the same three high-level categories: system level factors, employment factors and personal factors. Not all of the subcategories were raised during the interviews. For those that were, inductive analysis was used to identify themes within them as appropriate. This provided a nuanced understanding of some of the more complex, multifaceted subcategories such as delivery and assessment and employer support.

It is important to note also that the responses from interviewees mirrored the literature scan – their reasons were interconnected and multi-layered. They gave 2.5 reasons on average (**Table 1**: Interview reasons (105 ākonga interviews, August – November 2023)): sometimes these were equally important, at other times one was arguably more influential than others.

Direct quotes and notes from interviews are included to illustrate the points being made. To protect participants' anonymity, and because there were no meaningful differences in responses across the WBL divisions, interviewees' training provider and other potentially identifying information is not provided.[5] Rather, following Alkema, McDonald and Murray's (2016) example we have elected to contextualise the comments using gender, age and ethnicity.[6]

System level factors

Three out of five interviewees mentioned system factors that contributed to their decision to withdraw. System level factors can be divided into two categories: those that are outside Te Pūkenga's control and those that are within it. The former were less frequently mentioned as contributors to ākonga decisions to withdraw, however there are still some key learnings for Te Pūkenga.

Government incentives and low wages

Just under 20% of interviewees discussed low wages or the reintroduction of fees after the TTAF scheme had ceased as drivers in their decision to withdraw.

While having to pay fees was often seen as the 'final push' to withdraw, and TTAF was a government initiative that Te Pūkenga has no control over, there was an underlying issue around perceived value for money:

> *I wanted to take mine [the apprenticeship] off because I started getting the bills, which should never have come to me in the first place. And yeah, got a hell of a shock when you're having to pay $400 for maybe seeing someone twice a year. It's like, really? (F, 40+, Māori)*

> *When fees free was stopping and it was going to cost me $3000 plus GST a year, that was the final push – I have a family to support, and I didn't think I was getting my money's worth with just two visits per year and an app. (M, 25-39, Pākeha)*

[5] For privacy reasons, MITO provided Scarlatti with a database containing only the ākonga student ID number. When a MITO participant registered, we then requested their name and contact details. MITO are therefore aware of who has participated, and to ensure we uphold interviewee anonymity we are unable to attribute quotes/interview notes to a WBL division.
[6] We have also provided verbatim quotes in order to maintain the authenticity of interviewees' voices.

For these ākonga, completing their apprenticeship was not necessarily going to result in a payrise or promotion, and there was no compliance requirement to have a qualification for the job they were doing. This, combined with a lack of regular TA visits and support, contributed to their not perceiving sufficient value for money to continue.

Echoing the findings from the Te Pūkenga 2022 survey, low wages were mentioned by our interviewees as problematic. Ākonga who were a little older and had more financial and/or family responsibilities often struggled with the low training wages – even when they were aware of this prior to enrolling:

> *I would say basically it came down to the fact that I was doing essentially what you'd call an adult apprenticeship, I'm in my 40s and I've got 4 kids, mortgage, and was used to earning quite good money. And to go to an apprentice setup with low wages, it was pretty much impossible – so for the first year I was losing about $150/week, going backwards. I had some savings, I knew that was going to happen, and then luckily [my employer] ended up paying me "you know mate, you're doing the work of a fully qualified tradesman, we will pay you as one". So my last year and a half I was paid almost as a full tradesman, even though I wasn't qualified. But even that wasn't enough to live comfortably as I was in my [previous job]. (M, 40+, Pākeha)*

It is important to note that none of these ākonga wanted to leave their apprenticeship, or the sector: neither their motivation nor interest had waned, and they were disappointed about having to withdraw.

Delivery and assessment

In terms of system level factors directly within Te Pūkenga's control, this was arguably the most important. Close to 40% of interviewees mentioned experiencing a variety of challenges with delivery and assessment that contributed to their withdrawal. We identified a number of subthemes, which we discuss in detail next.

Support and structure on commencement of apprenticeship

Some ākonga received a box or ring binder of resources from their WBL division on enrolment but found there was little information about how to proceed. They would have liked an indication of (for example) where to begin, how much time to dedicate to bookwork each week, what the structure of the apprenticeship was, and who to contact about which elements. This would have helped to alleviate the sense of confusion they felt. These quotes are illustrative:

> *But for me personally, when there were so many different modules that we had to go through, I would have really appreciated a structure for me to follow like OK let's finish this one by this date and then it would have given me a better idea of when to complete. (F, 25-39, Filipino)*

> *Got the [WBL] box. As everybody I imagine who opens that does, I opened it and thought where do I start, where do I stop? What am I supposed to read, what do they want me what the flip do they want me to fill in? Who do I talk to? I don't really know. (M, 40+, Māori)*

> *From the get-go if I'd had like, cos I'm quite a visual learner, I had had on paper how the actual paperwork side of it works then I would have found that really handy, like maybe a bit of a timeline. Rather than, we just got kinda given 50 books or something and then yeah with not much info on it. And then we had the exams as well, but just the info on finding out about them and when they are and how to book and stuff was just not there. (F, <25, Pākeha)*

Flexibility to accommodate workload or seasonality

Ākonga across WBL divisions discussed a lack of flexibility in the duration of their apprenticeship. It was rigidly enforced, which did not always fit with ākonga workload or the seasonality of work. When they were working long hours or needed to achieve something that could only be done at a particular time of year, this slowed their progress. For most who mentioned this, the inability to be accommodated created a barrier to completion which contributed to their withdrawal:

> *I think when it changed over there was quite strict time limits on stuff, which for seasonal sort of plant growth, I just couldn't finish it. Cos what was required it either wasn't growing or you couldn't prune it at that time, so I struggled a little bit there, with the last – and that could have just been cos I didn't manage it properly – but um yeah I just struggled to complete it all. And maybe my boss not realising I should have started that unit right at the beginning and just sort of followed it through for a whole year. Then I probably would have finished it (F, 40+, Māori)*

> *[The ākonga received the following text message, which he read out to me verbatim:] "Hi [name] I'm letting you know that I will have to terminate your apprenticeship agreement. L3 should have been finished by [month] 2022, no credits have been submitted for a long time." He asked his coordinator if he could do it via paper-based system as that would have been easier with his workload, but he wasn't able to. (M, 25-39, Filipino)*

> *…there was a lot of things in the in the course where I had to do a lot of, umm, like practical things, take photos of what I was doing and it just wouldn't have worked being being the season that it was, if that makes sense. (M, 25-39, Pākeha)*

Setting out any seasonal requirements clearly at the beginning of the apprenticeship would help with forward planning. Having some flexibility to request an extension of time for unforeseen circumstances would also be of value in reducing barriers to completion.

Catering for different learning styles

Some ākonga found the bookwork difficult to engage with, as their learning style was not catered for. They mentioned having more variety in delivery of content (i.e. not just reading), being able to move across modules rather than having to complete them in sequence and learning by having discussions with others, as enablers of success:

> *I quite like doing it like that, like just doing a little bit here. If I get bored of that that, I'll move on to a different module. But my lady didn't like that. She told me no, you can't do that, you need to complete one module at a time, like it wasn't acceptable, so I was just like, OK. I wish they had just let me, you know, do a little bit here and there, like its self-driven learning. Like if they just left me to my own device, I probably would have been more likely to complete at my own time than to feel full like "you have to do this my way", you know. (F, <25, Pākeha)*

> *Probably the biggest challenge was that it was correspondence style, like there was no team aspect to it or learning together. It was just me, on my own, trying to study at home, or you know, find the odd space at work. I work well in a team, that's something I know about myself, and this just wasn't set up for me to succeed. (M, 40+, Pākeha)*

For ākonga with a learning disability, their frustration with the bookwork was evident:

> *I wasn't expecting like how much was involved in the apprenticeship. Like paperwork-wise, that was a shock, a big shock. I'm not very good – what's the word when you're not very good*

at paperwork? Illiterate? No. I'm [named three learning disabilities], so it's really really hard for me to do anything paper-wise. (M, 25-39, Pākeha)

Assessing for learning and competence

A number of interviewees mentioned issues with assessing for learning and competence. These took two forms. The first was around the use of online platforms. More specifically, they were concerned that uploading evidence to an online app does not guarantee learning or competence:

> *Umm so so so so there was two office ladies doing it with me at the same time. I think they got more booklets completed because they I think they're basically just took photos off the Internet to be honest with things they'd done because it was it was very simple to do. I think I did that with one of mine. Basically, I I knew what I needed It was like a like a photo of a plan that we were working on and then I had to notify all these things, but we didn't, again, for that company, we didn't have those sorts of plans. We didn't have those scope of works, so basically just downloaded something off the Internet and did the same thing on those plans. (M, 25-39, Pākeha)*

> *She also mentioned in passing that the variety of tasks needed to complete an apprenticeship wasn't always available in the workplace, as these days a lot of it is contracted out to other companies – the roofing is done by roofers, so you can't do the roofing unit, you're never going to get an opportunity to sign it off. She talked about people needing to upload photos of tasks but raised the issue of people getting photos of other people in the company doing it or getting the photo from somewhere else. (F, 40+, Māori)*

Relatedly, in addition to concerns about the authenticity of the photos uploaded as evidence, ākonga also raised the logistical challenges of taking photos while working:

> *The one thing that really I think was the catalyst [for withdrawing] was taking photos while working is not very easy. Like taking photos while you're calving a cow. You've got to do it, you've got to get all that work done, you've got to go home, have lunch, it's calving, you're tired, you're stressed, you don't want to piss your workmates off by asking them to stop what they're doing and take a picture for you. I know they put it online to be more handy but it made it less handy because now you have to worry about taking photos. (M, <25, Pākeha)*

> *I would have had to gone out of my way to dig a trench somewhere and lay a piece of pipe somehow and take photos of it. So it was just getting the logistics of all of that sort of together in that company wouldn't have worked as well. (M, 25-39, Pākeha)*

The second type of comment about assessment for learning and competence was around inconsistency across employers and TAs who were responsible for signing off or marking work:

> *Also, my [TA} was a bit shit. I talked to some of my mates and they didn't have the same experience. There is a fair bit of difference between [TAs]. My dude was writing paragraphs after paragraphs. I felt that my dude was trying to trip me off. On paper I was about 15% through but I wasn't ticked on any of my practical skills. It was a bit demoralising. (M, 25-39, Pākeha)*

> *A lot of apprenticeships are managed by the employer, are signed off by the employer, and require work in that industry to do the practical components. There's too much inconsistency – people are being signed off and coming out of their apprenticeship without a good enough level of skills. (M, 25-39, Pākeha)*

It therefore appears that, from an ākonga perspective, the current ways in which evidence is supplied and assessed is open to dishonest practice. Some believe that this devalues their qualification: a person who is less competent but has 'gamed the system' receives the same qualification as someone who has worked hard and (genuinely) demonstrated a higher level of competence.

Delivery and assessment content/format

Some interviewees identified challenges with the delivery and assessment format itself, with too much repetition, unwieldy processes and/or poorly constructed assessments:

> *But then when I got into it, it was sort of like, the question writing – whoever wrote the questions, I don't know what they were smoking at the time, but they didn't make much sense. Like especially on certain assignments or assessments they were like completely ass-backwards. You'd have to do the same thing four times and then go back over it…yeah, I struggled with it. I said to the tutor "this is written wrong, it's written backwards" and they'd say "yeah we know, but we can't do anything to change it". So I was like, "how do you expect the students to answer the questions right when the question itself is wrong?" (M, <25, Māori)*

> *I often thought if it was different for me, instead of like the typing down and writing and all that stuff – it seemed like a hassle to have to print this paperwork off to go and get it signed off by someone. The process seemed like it wasn't streamlined, and I would have rather been assessed by having a conversation with someone, because that's sometimes easier than writing down and knowing what information to give. (M, 25-39, Pākeha)*

> *There are too many units in the apprenticeship – some of them need to be merged. For example, the same principles apply to all framing, whether timber or metal. Boxing is another example – if I can box up a shed for concrete, I can box up a house for concrete. People shouldn't have to prove they can do boxing in ten different situations – just whatever comes along in the course of their work. (M, 25-39, Pākeha)*

Reviewing the assessment wording and processes, and simplifying assessments to focus on the principle rather than the variety of contexts in which the principle could be applied, may benefit ākonga.

Capacity to 'bridge the gap'

There were some interviewees who withdrew when they had to take an enforced break from work due to illness or maternity leave (where they had no fixed return date). There was no ability to 'bridge the gap' by being able to continue with the theory work until they could return to work:

> *I got a call from [training provider] a couple of weeks after I wasn't working to say they were withdrawing me from the programme, no option to continue with theory side of things. They just said straight away because I'm not employed, I'm not currently working for them, that they can't have me in the programme, which sucks for me because now I'm just doing nothing when I could have been just getting my theory done. That part really pissed me off, yeah […] I think if I just was able to continue the work from at home. Like there's some of the parts there that I had to like have photos and stuff from work but there was plenty of stuff I could have been doing from home. They could have gotten me ahead a bit when I'm just not working for multiple months now. (M, <25, Pākeha)*

> *I had done my assessments. They were just a couple of assessments left to sign by my nurse. But I [health condition] and had complications. It was very bad. I couldn't do the work or the assessments. They [the provider] withdrew me from the apprenticeship because I didn't*

complete the assignment. They emailed to tell me that if I didn't upload the assessment, they would withdraw me. But I wasn't able to even though I wanted to. I tried to log in again later but I wasn't able to. [Did they ever call you?] No, they just sent that one email. I would like to contact them again (F, 25-39, Pasifika)

For these ākonga, some flexibility plus a better relationship with a TA may have helped to overcome these challenges and allowed them to bridge the gap. It is to the latter point that we now turn.

TA support

This was another central contributing factor, featuring in 30% of interviews. While some had a good TA experience, the majority did not. Some had multiple TAs over their apprenticeship which meant they did not develop the relationship they felt was necessary for them to succeed. Many remarked on the length of time it took for their TA to mark their assessments:

I just found my training advisor wasn't the most supportive. [In what way?] I had a lot of work that wasn't marked for a while and she didn't get in contact with me very often. (M, <25, Pākeha)

They needed more support through more frequent in-person visits so they could talk through the questions that they had:

The [TA], I never once met him the whole two years I was there. He would call me maybe once every six months and say he's gonna come in, but never came in. I had no contact with him, he was not very helpful at all… So I had a lot of booklets filled out but I hadn't handed anything in just as I never saw him and I wasn't a hundred percent sure on anything. (F, <25, Pākeha)

When their TA did visit them, it felt very rushed:

See the difference between the [training provider] one and say [a non-Te Pūkenga provider] one is that you've got support there. Whereas with [training provider] it's a lot of over the phone, they can't physically see your work, that was the biggest problem for me – you can't see what I'm doing, you probably won't see what I'm doing for another 4 months. […] Four months waiting for a visit that will take maybe about 15 minutes is not really what I think value for money is, and it's not really getting you anywhere. You're rushing through things [to go see the next person] and you're basically just giving people the answer – yep, we'll sign you off. (F, 40+, Māori)

As these quotes illustrate, the lack of TA support impacted their ability to submit their assessments, and therefore on their ability to progress through their apprenticeship in a timely manner. While some mentioned their TA had said to phone or email with their questions, few did so – they did not want to add to the TA's workload, or imagined their question was not important enough to justify a phone call or email.

Kanohi ki te kanohi (face to face) sessions, whether held in-person on online, provide learners an immediate real-time opportunity to 'right the course' of their thinking – a point supported by the educational literature[7]. Additionally, and as we will illustrate in the following sections, having a supportive TA relationship could also help to mitigate a number of other challenges faced by ākonga.

[7] See for example Stone and Perumean-Chaney (2011) The benefits of online teaching for traditional classroom pedagogy: A case study for improving face-to-face instruction. *MERLOT Journal of Online Learning and Teaching* Vol. 7, No. 3, pp. 393-400.

This finding raises another important point: what is the role of the TA, and can they serve both employer and ākonga? Could pastoral care be provided differently through, for example, a mentor-type role?

Cultural responsiveness

The literature scan highlighted the importance of employers providing pastoral care for Māori and Pasifika apprentices. The interview findings support this but suggest that a kanohi ki te kanohi relationship *with their TA* is also an enabler of success for these priority learner groups. Six out of the 35 Māori and Pasifika interviewees raised this point:

> *We were given a year to do Level 4, and I had maybe gone over just a little bit, and I was struggling with support, all their support was done over the phone and its really hard to engage. They did have little like wānanga here and there where they'd bring us together and sort of work on particular things, but you know, it's cool while we're together but when we split up again we would be apart for maybe 4 months before the next wānanga. So it was really just around the support. They, you know, everybody said they would help, but when it came to helping, yeah, it was hard to get them to sit down with me and actually, you know, explain it a bit better. (M, 25-39, Māori)*

> *He said one of his tutors was great – they had monthly sessions which were held during work time, at their work, and it enabled them all to ask questions and get things checked by her. [He then talked about some problems and starting to fall behind…] She went above and beyond because she understood that it wasn't working out with their boss – she even made time during the weekends for him and some others to meet with her to help them smash out some books. She went into bat for them, meeting with their boss to ask for them to have a bit of time during work, but the boss went off at her. After that, she never came back on-site – she just kept in touch via texting and emailing. He said, "From then on I couldn't really do it, cos I'm just talking over the phone and I can't actually understand, cos I'm usually better with someone in front of me, explaining." (M, <25, Pasifika)*

> *If [WBL] gave me an assessor that put in the time to visit me and help me get my stuff over the line, that would have helped. A regular assessor that actually cared about what we were trying to do. (M, <25, Pasifika)*

Two other ākonga mentioned that the in-person off-site courses/classes were beneficial but that meaningful learning only occurs where everyone attends and the TA (or tutor) is skilled in facilitating participation in the discussion:

> *[To] go to class and have like a handful of students turn up, it was like, (a) I feel sorry for the tutor, cos [name] is real cool, she knew her shit, but then it was like I'm wasting my time 'cos part of going to class is to go and have a discussion and really get the most out of the class, and I felt like I was the only one talking with [tutor]. It's hard. (M, 25-39, Māori)*

These findings suggest that investing in whakawhanaungatanga (the process of relationship-building) between TAs and apprentices will provide a richer and more culturally appropriate experience for Māori and Pasifika ākonga. However, we believe that adopting a whanaungatanga approach could also benefit the wider community of apprentices as it was not only Māori and Pasifika who mentioned the need for relationship, as discussed in the previous section.

Further to this point, Te Pūkenga may find value in considering embedding Te Whare Tapa Whā for Māori ākonga and incorporating a Fonofale approach to teaching (see **Appendix 3**: The relevance of the Fonofale model) for Pasifika ākonga.

Employment factors

In line with the literature, employment factors were the most important contributor in ākonga withdrawals, with 70% mentioning one or more of the subcategories.

Employer support

Three out of five interviewees discussed challenges related to employer support. We identified some subthemes within these responses and unpack these below, in descending order of prevalence.

We also note here that two interviewees said that the company they worked for had closed due to financial difficulty, and one employer lost a large tender which was the bulk of the work that the apprenticeship related to.

Capacity/capability to provide training

For 20% of interviewees, employer support for training was lacking. The most common themes were little encouragement or prioritising of their learning, no suitably qualified person in the company being delegated responsibility for their training, and a lack of formalised structures or processes to support their training progression. They were not receiving any on-job training over and above that of a labourer:

> *Manager didn't know he was supposed to train apprentices – one of the old boys that I worked with was actually like "oh, well, it does say in my contract I'm meant to train the apprentices. Oh, I didn't know that." It sort of seems more like you're just a labourer, not so much getting trained. I think if you go to a bigger company, they have a more streamlined process for that. (F, 25-39, Pākeha)*

> *We were just put in as workers, we didn't get training, nothing. Just general stuff he [their manager] should have been doing, he wasn't bothering. (M, 25-39. Pākeha)*

> *The main thing that made me want to quit was just feeling that I wasn't supported enough. With our supervisor, there wasn't that space being made, where I can learn and I can stop and take photos while we're working, get that core evidence. Even being put in those kinds of roles that were required. (M, <25, Māori)*

This is a significant concern, as apprenticeships are often marketed as 'earn while you learn' opportunities: if the 'learn' aspect is missing and they are only being paid training wages, there is a risk of them being used as cheap labour. It is vital that employers have both the capacity and capability to provide the necessary level of training and supervision.

Allocation of study time during work hours

This was a common subtheme for interviewees, with 16% stating their employer did not provide time to complete study during working hours – sometimes even when it had specifically been agreed to at the beginning of their apprenticeship:

> *But yeah I found it extremely frustrating that I kind of felt like the way it worked they took the $2000 a year [from the Apprenticeship Boost scheme], put it in the budget and weren't really interested in me doing the apprenticeship, so I did it all in my own time. Everything I did, I did on my own time. None of that money came back to me. (F, 40+, Pākeha)*

It would have been nice to have some more support during work hours to fill in the bookwork – if there was some allocated time that I could have gone into the office and done it. (F, 25-39, British/Irish)

Apprentices we spoke to felt that not only did their study relate to their job role, but that it contributed to their employer's business professionalism and profits, They believed that, on that basis, they should be given at least some time during work hours to attend to their bookwork requirements:

She asked for an hour a week where she could specifically go and do the things without being pulled away to do other jobs. Her rationale was that it was still work for the nursery, but she needed to prove she could do them to get a unit completed. But her boss would not allow it. (F, <25, Pākeha)

And I just felt it was pretty unfair for my employer to like you know, expect us to be qualified to help the company but not giving us time to actually get the stuff done. (M, <25, Pasifika)

Provision of the range of practical experience

Ten percent of interviewees were unable to access the range of practical experience they needed to complete their assessments. This may have been due to not being allocated those tasks in the normal course of their role, or due to the company not having the necessary equipment or undertaking that type of work:

Practically speaking, for example, there was only one company in town that did concrete slab work as that's commercial, and I would have had to go and work for them for a couple of weeks to get that experience and proof that I could do it. (M, 25-39, Pākeha)

In my area of work that I'm in, they put me on a landscaping course, which was good and I was all for it, and I was getting through the work, but for me it didn't quite cover what I specifically did. So I just do kind of planting and more sort of the design type work of landscaping whereas this kinda had like for the practical sets of stuff that I couldn't do, because I don't do concreting and I don't do wooden structural kind of stuff and that was why I stopped because I don't do that in a day to day basis so it was hard for me to actually be able to complete my apprenticeship because I don't do those things. (F, <25, Pākeha)

Opportunity to attend off-site training

As discussed in the literature scan findings, 10 percent of respondents in the Te Pūkenga 2022 survey had not been allowed to attend off-site training. The current research echoes this finding: close to seven percent of our interviewees said their employer would not give them time off to attend off-site classes or block courses. Reasons given included a high workload, staff sickness, finances, or that the apprenticeship was not seen as a priority by the employer. In their own words:

I felt like my boss was trying to drag it out for all kinds of reasons, saying that COVID had interrupted things, and he couldn't let multiple people go off on the course at the same time when other people were sick. (M, 25-39, Māori)

I should have finished my apprenticeship but I wasn't allowed to go to the final course but my boss did not allow me to go because he was in financial hardship. (M, <25, Pākeha)

I changed employers and they were, I guess, supportive of it but not really. It was a struggle to actually make sure I could have the days off, and then it was like I'd ask for help but I wouldn't get help for it. (F, 25-39, Pākeha)

Given that block courses are a fundamental part of many apprenticeships that contribute to social as well as learning needs, it is important that employers support their apprentices to attend.

Availability of staff for sign-off

Five interviewees mentioned a lack of supervisory staff available to sign off their practical assessments or provide the necessary observations. These interviewees were often shift workers working nights or were working on their own, but observed that this was a common challenge faced by apprentices in their workplace:

> *I kind of found it the same as everyone else in my workplace because there was only one person who was in the kind of supervisor role, and she wasn't really there very much, so I think we all found it really hard to progress like with the actual course because a lot of the things required the supervisor to kind of sign off or to actually do the activity for us, and she just didn't have the availability for that. (F, <25, Pākeha)*

This is frustrating for apprentices as it is out of their control, but presents a major barrier to their ability to progress and complete their qualification.

Provision of pastoral care

And lastly under the employer support subcategory, a lack of pastoral care and a general sense that the employer did not treat them well as a person, was mentioned by five interviewees – all women:

> *More support. If they just treated me like a human. {your employer?] Yeah. Like if they didn't see how many times I f***ed up, you know, if they just gave me the time, if they put time into me and really made sure I was doing it the right way. (F, 25-39, Pākeha)*

> *If they don't want you they will find ways to make it shit for you so that you quit. (F, 25-39, Pākeha)*

In addition to a lack of pastoral care, one Pasifika interviewee expressed the race-based favouritism demonstrated by her employer:

> *I felt discouraged and angry that my employer was showing favouritism to other workers who had recently joined the staff or who were not Pasifika. I noticed that the Pasifika staff were not getting the same opportunities as everyone else. We were not invited to grow. If the employer treated me with the same privileges as the others, and valued my years of service and senior responsibilities, I would have stayed I think. (F, 25-39, Pasifika)*

Another had identified a solution to a challenge she was facing which, had she been able to speak to her employer about it, would likely have made a significant difference to her decision to withdraw:

> *I feel like I could have talked to my boss earlier on when I first started not enjoying it about being switched around a bit more to some younger people as well, to break it up. Yeah just maybe a bit of communication from my side. [What do you think stopped you from doing that?] I dunno, I just didn't want to be a hassle, like I'm lucky to have an apprenticeship so just knuckle down and do what you're told kind of thing. I just didn't want to, like he's already busy I didn't want to be more of a hassle, put more on his plate. And he's already thinking about so much and I don't want him like thinking "oh she's got to be with a young person". (F, <25, Pākeha)*

We will return to this sense of being fortunate to have an apprenticeship (or a job), and fear of reprisal, in the next section.

Workplace culture and conditions

While the WBL division experts we spoke to said they had not heard of any experiences of bad workplace culture or conditions, one quarter of our interviewees mentioned this as a factor in their withdrawal. Many told us of toxic workplace cultures where they either witnessed or were subjected to bullying themselves. Seven interviewees told us of being made to work in unsafe conditions, with employers paying little attention to workplace Health and Safety:

> *Um, I found that the apprenticeship that I was wasn't really for me, and every time something would go wrong, I would always get hurt because I was working with glass, so I didn't feel too comfortable, um, continuing with that. Plus doing a lot of the work by myself was kind of, um, intimidating when you had like a 2-meter window by 2-meter, just trying to put it up while you're two stories high. (M, <25, Māori)*

> *That [preventable work injury] kind of turned me off the whole industry. It was really the company that put me off. That made me rethink my whole career choice. I was like, how many more companies are going to be like this? It was already so hard to get the apprenticeship for myself. I was sick of working for a boss who followed the money but didn't follow the other half, the Health & Safety side. The employers and managers always trying to get you to turn a blind eye. I just couldn't agree with that. It was unprofessional. (M, 25-39, Pākeha)*

Women often acknowledged the known, pervasive challenges of working in a male-dominated industry – the inappropriate comments directed at women and their inability to 'take a joke'. Almost 20% of women told us they had experienced sexism and/or sexual harassment in the workplace:

> *You know, you hear stories about working as a female in a male-dominated industry, and… one of those… yeah… the work itself was great, I really loved the work, but sometimes the people in that industry can uh just be a bit of a struggle to work with… It's mostly just how you get treated, umm, there, you know, were degrading comments, which I get it, in that sort of industry there is a lot of…um, men like to look at it as 'playful banter' but there's boundaries to that playful banter and some that would just come out a lot harsher in certain environments, or around certain people, so it gets to a point where you know, how much of this will I put up with? (F, 25-39, Other)*

> *When I first got into it [as a young woman 20 years ago] yeah I didn't really know much and was taken advantage of quite a few times by a few foremen and stuff. Like I was given a really good wage, but it came at a price. Yeah. It wasn't very nice…. Like I'd get asked to, like, you know, if you want more money you'll have to sleep with this person, that person, you know. And it still happens. I've witnessed it again three times with my own eyes and it was like "you disgusting pigs". But it still happens and no one checks, and this is the thing – people just sit at their desks and organise all these things for other people but they don't actually check. If someone had checked before whether people were on their apprenticeship and doing it properly, you know, we wouldn't be having this discussion. (F, 40+, Māori)*

> *Even if women try to get into these industries, they are driven away by bad behaviour and negative attitudes. (F, 25-39, Pākeha)*

When asked later in the interview whether they had been able to speak to anyone at work or to their TA about the workplace issues they were having, most said they had not. There seemed to be a fear of reprisal, either through losing their job or making things worse for themselves:

I think I have spoke up a lot more. I should have been encouraged, yeah I wish I spoke up more and didn't care about the outcome. I wish I wasn't paranoid about being shunned or let go if I spoke up. It really created that kind of feeling in me, that you had to keep your mouth shut and do as you're told. And that doesn't seem like how we should do things these days. (M, 25-39, Pākeha)

And I don't really like, you know, forcing a problem of starting confrontation. So I do just kind of try and back away from that. (F, <25, Pākeha)

[And what about the sexual harassment, have you been able to raise that with your [WBL division] person?] No. If you say anything, you lose your job. What do you want to do – pay your rent and your food for your kids, or do you just wanna, you know, not make a big deal? (F, 40+, Māori)

We understand that this is an employment issue, and that Te Pūkenga does not have direct control over the situation. However, we believe that apprentices are very vulnerable and from our interviews we know that unsafe workplaces, bullying and/or sexual harassment do have an impact on their training. We return to the importance of the TA (or mentor) relationship as a mitigation strategy: where the TA is a consistent and frequent presence, ākonga are more likely to feel comfortable raising problems such as this. They can then potentially be assisted to find a solution, such as moving their apprenticeship to a more suitable employer.

Wages (cheap labour)

The feeling of being used as cheap labour was a factor for nine percent of interviewees. One noted that their work required a level of skill that was not reflected in the pay rate:

Because basically he was getting such cheap labour out of me and I was doing work that no other apprentices would have been able to do in their first real year on the tools, you know, being left on jobs and finishing it up, all of that kind of stuff. (F, 25-39, Pākeha)

We get paid the same as a Macca's worker, but if we do stuff wrong, we could kill people, you know? (F, 25-39, Pākeha)

Training costs

Nine percent of interviewees cited training costs as a factor in their decision to stop training, where they (rather than the employer) were responsible for paying course fees. This often (but not always) coincided with the removal of the TTAF scheme. It was exacerbated in situations where there was no compliance requirement to be qualified combined with little perceived value-for-money:

And then they wanted – it was under a free scheme for tradesmen – but um they wanted to charge me once the year or year and a half was up, and I just didn't want to pay for it so that's why I pulled out. (M, 40+, Pākeha)

Personal factors

Almost half of the interviewees (48%) mentioned that personal factors contributed to their decision to withdraw. For 18% this was the sole factor, but for most it played a lesser role.

Change in personal circumstances

Reflecting the findings from the literature, this was most commonly cited personal factor for withdrawals. It contributed to the decision in some way (but not necessarily as the main reason) for one third of the interviewees we spoke to. The most common changes in personal circumstances were health-related (of themselves or others), travel-related (some had committed to overseas travel expecting to have finished their apprenticeship at that point) or family-related (having one or more children during the course of their apprenticeship).

There is little that Te Pūkenga could do to support ākonga in some of these situations (such as caring for a terminally ill family member). However not all changes in personal circumstances preclude being able to continue with an apprenticeship. Te Pūkenga could offer flexibility for apprentices to remain enrolled and work on completing the theory component of units for a defined period while they are unemployed – for people on extended maternity leave or those who have a time-limited health challenge and who know they will be going back into the workforce (possibly with the same employer).

Balancing the dream with reality

This was the second most common personal factor identified through the interviews, featuring in 20% of conversations. The analysis revealed the following three subthemes:

Young and restless?

Whereas the literature scan discussed the prevalence of young people withdrawing from their apprenticeships to pursue other career options, we found this was true across *all* age brackets. Half of the interviewees who fell into the 'dream vs reality' theme told us that they simply came to the conclusion that the industry wasn't for them, for a variety of reasons:

> *She felt that if she wanted to start a family, she wouldn't be able to go back into that manual labour after taking time off for maternity leave – it just wasn't going to be a practical career option. (F, <25, Pākeha)*

> *I was living really far out of town. My friends were in town and everything that I liked to do was in town. (M, <25, Pākeha)*

> *I didn't like scaffolding anymore. I just didn't want that to be the only thing I could do when I was older … I realised it was something I don't want to be doing for the rest of my life, so why waste any more time doing it, but there was all those factors that led into the decision … (M, 25-39, Māori)*

> *I loved that job. It was my dream to become qualified. But I knew in myself there were some jobs you needed strength. And I didn't have that. So I knew I had to find other ways to strengthen my arms, or find different techniques to be able to do the job. But otherwise I could do practically everything. (F, 25-39, Māori)*

For most of these ākonga it could be argued that having a more realistic expectation of the industry before they entered may have helped. However, we believe that it was not until they experienced it for themselves that the reality of their career choice became evident.

It is also important to note here that this factor was not generally the sole contributor to withdrawal decisions: it played a role where other more serious factors were in play, and was almost framed as a form of justification for leaving. For example, sexism, poor mental health from feeling isolated, low wages, and a toxic workplace culture respectively were the main catalysts for withdrawal for the four interviewees above.

The time squeeze

Mirroring the literature scan and the findings above (Allocation of study time during work hours), almost 8% of our interviewees found it difficult to manage the time squeeze. This was especially the case for the men in the middle age bracket who had children and were working very long hours:

> *Working 60–70 hours a week, plus having kids, also meant he left assignments to the last minute which he found a bit hard. Not impossible, just hard. (M, 40+, Pākeha)*

> *Making time to study would have been the biggest thing – sorting out a better routine, but the hours were really long and by the time he got home he just wanted to go to sleep. He also just had a baby. (M, <25, Pasifika)*

> *You get home, you're buggered and then your kids want to play for an hour and a half, and you've got to have dinner and a shower, and then you're buggered too, so you just want them to go to bed and the last thing you want to do is do some study – I just want to watch a braindead movie! (M, 25-39, Māori)*

For Māori and Pasifika ākonga, cultural obligations regularly add to the time squeeze. Often, and sometimes to the detriment of their studies, Pasifika ākonga in particular will prioritise their cultural obligations over their studies (as illustrated in the Fonofale model). When this is acknowledged and understood by the employer/provider, an honest and caring conversation can be had to seek a win-win solution):

> *I also had too many family and cultural commitments and obligations to fulfil – life got in the way. (F, 25-39, Pasifika)*

In addition to adopting a culturally appropriate response, this notion of a time squeeze could be partially alleviated through employers allocating time during work hours to complete study, Te Pūkenga explicitly outlining the expectation of hours of study in apprentices' own time, and TAs providing guidance and support around time management.

Selling the dream

The WBL division experts we spoke to mentioned TAs ability to 'sell' the idea of an apprenticeship, and that the thought of training was appealing to many but didn't always align with the reality. However, some interviewees thought it was the Te Pūkenga marketing itself that portrayed an unrealistic picture. Two women interviewees in particular highlighted a disconnect between the messaging designed to attract women into the trades and the reality of the industry:

> *I find it 10 times harder because I'm a female. Every time I ring up for a job, it's "oh is this for your partner, is it for your brother?" And it's like, "no." Every time. Which makes me sort of angry that they use so many females on their apprenticeship things, to try and get them in the*

door at like training institutes. Because the reality is yeah, how many qualified female [trade] do you know? There aren't a lot. (F, 40+, Māori)

So I think going into it I had the mindset that, it sounds kinda silly but what you see on social media and stuff of [work] sites and it's all kind of fun and game, and my idea of it was a lot different to what the job actually was. So not having enough experience in that industry to actually know what I was getting into. Like if I had had some more work experience then maybe I would have realised was the actual job was. (F, <25, Pākeha)

This could be overcome by reviewing the marketing of the trades in print and social media to ensure that both the people and situations are represented more accurately.

Literacy and numeracy

The talanoa with Pasifika ākonga revealed that many struggled with literacy and numeracy – this was largely due to having English as a second language (ESL). This was true for some of the (very) limited number of ethnic minority migrant interviewees who spoke to us. While their spoken English was proficient, they mentioned the amount of dense reading and essay writing as barriers to completion:

[I wish I'd known] how important reading and writing is – maybe I would have tried harder at school. I don't like reading and writing, and there's a lot of it in the theory part of the units. But I just do it because I have to do it. (M, 25-39, Pasifika)

However, literacy and numeracy challenges were not restricted to ESL interviewees, as we see here:

*F***, I couldn't do the paperwork – it was too hard. Oh I could, but it's like I can't sit down and write it. They told us that um it was going to be mostly practical but then they brought a big-ass book out and f*** it was too hard and I couldn't do it. [So was there too much reading and writing?] Yeah. It wasn't that it's hard, but it just, f***, I can't put myself just to sit down and write. Cos they said it's just going to be pictures, like, pretty much all of it, and then they bring the book out and it's like huge. (M, <25, Pākeha)*

A total of 3 out of the 105 interviewees faced this frustration.

Transience

As noted in the literature scan, transience is a common challenge among dairy farming apprentices. This was reflected in some of the interviews, where ākonga mentioned moving to new farms where they were not supported to continue their apprenticeship. The need to secure a job took precedence over ensuring they were able to continue training, especially where employers did not perceive a need for their staff to be qualified. This finding is echoed in other work that Scarlatti has done for Dairy Training Ltd and is a known challenge for the wider food and fibre sector in Aotearoa New Zealand.

However, transience is also a factor for apprentices in other contexts. For example, it can be difficult for some apprentices in rural or remote areas where employment opportunities may be limited. A couple of interviewees asked for help from their TA to find new employment, but some others suggested it could be part of Te Pūkenga's remit to provide support in these situations.

Te Pūkenga could develop a value proposition (with incentive if required) for new employers of an ex-apprentice to pick up the apprenticeship.

Gender

Sexism and sexual harassment have been discussed above under **Workplace culture and conditions**, and should not be confused with gender. While gender per se was not a factor in withdrawals (i.e. women did not withdraw simply because they were women working in male-dominated industries), 10% of the women we spoke to had gendered experiences that contributed to their decision to withdraw:

> *When the young male apprentice makes a big mistake, "Oh, no worries, mate. That's all right. We'll fix it all." If I make a mistake, or another female made a mistake then you'll get hassled about that forever. It's the worst thing in the world. There's no pat on the back. It's like, "oh, what did you do that for?". (F, 25-39, Pākeha)*

> *One, I was, there was no other females, so mentally I found that challenging, as well as physically, umm, just cos I never really knew where I stood…And I think just cos I was the only female apprentice (and tradie) I really struggled to see a comparison, like, cos like comparing myself and I haven't really met any other female builders that were like me. (F, <25, Pākeha)*

> *But [being female] also led to being quite secluded, like I found it really hard to relate to people, especially cos they were all normally in their 40s and I don't have a lot in common with a 40 year old man, like, or they might all go and get beers in the weekend but I'm not gonna go as well, cos it could be kinda weird…I think like just the social aspect of not feeling super comfortable or like super included – not against anyone at the workplace – but yeah felt quite left out and you're not really understood, it's quite hard to explain, but you know if you work at a workplace and you're not really like included, then…you kinda get left out the loop a little bit. (F, <25, Pākeha)*

Importantly for our recommendations, and echoing the literature findings, two of the younger interviewees mentioned the difference having a second woman apprentice made to their experience:

> *Like me and my best friend [name] started at the same time so I had a girl with me at the time but then she ended up leaving. It was good having another female in that trade with me, you know […] There was two of us girls rather than one girl getting picked on really, so that we could both talk to each other about how we can work around it. (F, <25, Pākeha)*

> *Also I think if there was another girl, like another girl tradie, that would have made a huge difference [as she has found in her new role]. Just to have that one person that just who kind of understands you a bit more. Yeah just would have helped you feel like a bit more like relatable. You just have a better connection I feel, like not that I don't get along with guys, but it's just so much easier when you walk into a room to talk to the girl. (F, <25, Pākeha)*

While it is not Te Pūkenga's responsibility to place apprentices with employers, we nevertheless believe that there are some ways in which Te Pūkenga can help improve the experience of women apprentices. We discuss these in the following section.

Relative importance of factors

A quantitative analysis of the interviews has been undertaken. For each interviewee, reasons for withdrawing have been coded as either a main factor in their decision to withdraw, an important factor, or a mention. **Table 8** summarises the results. For our analysis, we want to understand the complexity of reasons contributing to an ākonga's decision to withdraw, so multiple reasons are coded for each person where applicable (and hence percentages do not sum to 100%). We observe that:

- 54% of interviewees mention employer support as a factor contributing to their decision to withdraw
- 38% mention delivery and assessment as a contributing factor
- 28% mention a change in personal circumstances
- 25% mention training advisor support.

Table 8: Interview reasons coded

Category	Subcategory	Main factor	Other important factor	Other mention	Total mentions
System reasons	Government compliance / policy	-	-	-	-
	Government incentives	2%	3%	6%	**10%**
	Low wages	7%	2%	4%	**12%**
	Natural disasters	-	-	-	-
	Delivery and assessment	18%	12%	8%	**38%**
	Training advisor support	13%	7%	5%	**25%**
	Cultural responsiveness	-	-	2%	**2%**
Employment reasons	Employer support	46%	4%	5%	**54%**
	Workplace culture / conditions	23%	-	-	**23%**
	Wages	3%	3%	2%	**8%**
	Training costs	3%	3%	1%	**7%**
	Compliance requirements	-	-	-	-
Personal reasons	Dream vs reality	10%	8%	4%	**21%**
	Change in personal circumstances	23%	2%	3%	**28%**
	Literacy/numeracy	-	1%	1%	**2%**
	Transience	-	-	3%	**3%**
	Gender	2%	-	2%	**4%**

Segmenting the reasons

Segmenting the reasons enabled us to estimate the proportion of all reasons that could be addressed by a given intervention. We applied a weighting to the responses (based on whether it was a main factor, important, or just a mention) and scaled to 100% - i.e. total interviewee reason responses (**Table 9**: Weighted interview responses). We now observe that:

- Employer support accounts for 27% of all withdrawal reasons
- Delivery and assessment has a 15% contribution
- A change in personal circumstances accounts for 17% of all reasons.

Table 9: Weighted interview responses

Category	Subcategory	% weighted responses
System reasons	Government compliance / policy	0%
	Government incentives	2%
	Low wages	5%
	Natural disasters	0%
	Delivery and assessment	15%
	Training advisor support	9%
	Cultural responsiveness	0%
Employment reasons	Employer support	27%
	Workplace culture / conditions	11%
	Wages	2%
	Training costs	2%
	Compliance requirements	0%
Personal reasons	Dream vs reality	8%
	Change in personal circumstances	17%
	Literacy/numeracy	0%
	Transience	0%
	Gender	1%
Total		**100%**

Aggregating across categories, this results in an approximately even split across system level, employment and personal factors (**Table 10**). The implication of this that we should consider intervention efforts in roughly equal proportions as well.

Table 10: Interview category summaries

Category	% weighted responses
System reasons	32%
Employment reasons	42%
Personal reasons	27%
Total	**100%**

How does this compare to other research?

We have used other research, including the Alkema, McDonald and Murray (2016) study, plus BCITO and Careerforce apprentice withdrawal survey data, to provide calibration data points at a high level. **Table 11** shows the approximate breakdown of system, employment and personal reasons for withdrawal, found by each of these studies.

We see that although there is variation between the studies due to differences in study cohorts and methodology, the percentages are comparable (between 20-40% of reasons for withdrawing in each category).

Table 11: Withdrawal reasons – comparison across research studies

Category	Interviews	Alkema study	BCITO survey	Careerforce survey*	Average
System	32%	12%	32%	21%	**25%**
Employment	42%	40%	28%	15%	**37%**
Personal	27%	49%	40%	76%	**39%**

*Note: The Careerforce splits are based on a subset of withdrawn apprentices only.

Interview findings summary

- Interviewees mentioned multiple, interconnected reasons for withdrawing and most were disappointed not to continue the apprenticeship.
- Employment factors were the most commonly cited group of reasons, followed by system level factors and personal factors.
- These findings are comparable with other studies when calibrated at a high level.
- There was no meaningful difference in responses from across WBL divisions.
- Women were the priority learner group facing the most significant challenges.
- Embedding the principles of Te Whare Tapa Whā and the Fonofale model into apprenticeship programmes would benefit Māori and Pasifika ākonga.
- In their responses, interviewees often alluded to potential opportunities for Te Pūkenga to improve the apprenticeship experience: as we found with the literature scan, these were not restricted to system level factors.

Drawing it all together: Ideas for possible interventions

Overview

We began each interview by asking ākonga why they had enrolled in an apprenticeship. Almost 20% of interviewees reported that their employer either encouraged them to enrol in the apprenticeship or required them to as part of the job offer (this was sometimes a compliance requirement). The majority, however, were seeking their first industry qualification. They wanted to level up their pay, become more employable, get higher up in the industry or eventually own their own business. For some, an apprenticeship was a gateway to a career that they had *"always wanted to do" (M, 25-39, Pasifika).*

Interviewees enjoyed the opportunity for learning that apprenticeships provided – being able to gain an understanding of the 'why' behind their chosen trade. The practical, hands-on nature of the course allowed them to apply the theory they were learning. For some who were living and working in more rural areas, off-site classroom courses provided social connection with like-minded others and enabled them to join a community. One said, *"It was just a really healthy way to give purpose to my life". (F, 25-39, Pākeha).*

With that in mind, we believe it is important to share what we learned about the impact of withdrawing:

> *Yeah it got pretty bad, ended up on ACC with depression and mental health things, on antidepressants. I didn't even want to work for anyone anymore after that, it's got me to that point. (M, 25-39, Pākeha)*
>
> *He felt that Health and Safety wasn't a concern for his boss. He had started having panic attacks after the near miss incident. (M, <25, Māori)*
>
> *[withdrawing] was tough at the time because "I was very excited about it and I enjoyed going to work every day, I thought I was going to go all the way through and get qualified, which is something I seem to struggle with". (F, 25-39, Other)*
>
> *It was unfortunate because it's definitely put me off education in the long run, because considering uni wasn't for me so I thought an apprenticeship [would be] more practical, I'll just move into that, and now maybe that's not for me…unfortunately I just kind of quit the whole industry and thought that was it. (F, <25, Pākeha)*

The ideas for possible interventions that we present here are thus designed to serve two purposes:

1. To help ākonga to complete their qualification and contribute to society, while enabling them to maintain their physical and mental health, dignity and confidence
2. To help Te Pūkenga to improve the apprentice experience in ways that will have the most impact on the most ākonga, such that more are able to gain their qualification.

We have embedded flexibility so that these interventions can be contextualised for each WBL division.

We provide quantitative evidence to indicate which interventions are likely to have the greatest impact on reducing apprentice attrition at a system level. Prioritisation is based on the following dimensions:

1. Entry cohort – volume of apprentices in the system
2. Number and timing of withdrawals – the stage of learner journey when apprentices withdraw (duration into the programme)

3. **Target number of apprentices** – the proportion of withdrawals for whom the intervention will address their reasons for withdrawing
4. **Potential efficacy** of an intervention.

Broad intervention areas

Approach to development

We have taken a holistic approach to developing possible intervention ideas for consideration.

The ideas are based on the findings from the apprentice attrition analysis, literature scan and interviews, and take into consideration the context of the vocational education and training sector.

We have found that:

- There are system level factors within Te Pūkenga's control that, if addressed, will make a significant difference in helping more ākonga complete their apprenticeship
- There are some employment and personal factors that can be mitigated by Te Pūkenga
- There is overlap between some system level factors and employment factors (e.g. delivery and assessment, and employer not able to provide range of practical experience).

We have identified three broad clusters of intervention ideas:

1. Refine programme content/format
2. Enhance ākonga support
3. Strengthen the perceived value proposition.

Mapping the clusters against withdrawal reasons

We mapped each of the three reason categories from the literature scan and interview analysis onto the three clusters of intervention ideas (**Table 12, Table 13** and **Table 14**).

A star rating has been assigned to each cluster of intervention ideas as a visual representation of how applicable each could potentially be to addressing the reasons, as follows:

Star rating	Applicability to addressing reason
★★★	Highly applicable
★★	Applicable
★	Somewhat applicable

For example, both refining the programme content/format and enhancing ākonga support clusters are highly applicable to addressing the challenges faced by ākonga as they commence their apprenticeship, but not at all applicable to government incentives or low wages (**Table 12**). If we can strengthen the perceived value proposition of the apprenticeship, then the issue of training costs reduces (**Table 13**).

Table 12: Clusters of intervention ideas and applicability to ākonga withdrawal reasons for system level factors

Reason			Refine programme content/format	Enhance ākonga support	Strengthen perceived value proposition
System level factors	Government incentives and low wages				★★★
	Delivery and assessment	Support and structure on commencement of apprenticeship	★★★	★★★	
		Flexibility to accommodate workload or seasonality	★★★		
		Catering for different learning styles	★★★		
		Assessing for learning and competence	★★		★★
		Delivery and assessment format	★★★		
		Capacity to 'bridge the gap'	★	★	
	TA support			★★★	★★
	Cultural responsiveness		★	★★★	

Table 13: Clusters of intervention ideas and applicability to ākonga withdrawal reasons for employment factors

Reason			Refine programme content/format	Enhance ākonga support	Strengthen perceived value proposition
Employment factors	Employer support	Capacity/capability to provide training			★
		Allocation of study time during work hours			★
		Provision of the range of practical experience	★ ★ ★		
		Opportunity to attend off-site training			★ ★
		Availability of staff for sign-off		★	
		Provision of pastoral care		★	
	Workplace culture and conditions			★ ★	
	Wages (cheap labour)				★
	Training costs				★ ★ ★

Table 14: Clusters of intervention ideas and applicability to ākonga withdrawal reasons for personal factors

Reason			Refine programme content/format	Enhance ākonga support	Strengthen perceived value proposition
Personal factors	Change in personal circumstances		★		
	Balancing the dream with reality	Young and restless?		★ ★	
		The time squeeze	★	★	
		Selling the dream			★
	Literacy and numeracy		★ ★	★ ★	
	Transience			★ ★	★ ★
	Gender			★ ★	

Possible intervention ideas and their estimated impact

We have identified a number of ideas for possible interventions. We matched these to ākonga reasons for withdrawal and then mapped them onto the stages of the learner journey. Some of them cut across more than one cluster and stage of journey, reflecting the multilayered nature of withdrawal reasons.

Evidence-based approach to prioritising interventions

We took an evidence-based approach to identify where Te Pūkenga could prioritise efforts to address the reasons for withdrawal (within their control). This task had two parts:

1. **Provide additional details** – provide some additional detail to intervention ideas. Many of these ideas are not 'new' and have already been identified by WBL divisions and previous research, but the interviews and broader analysis have provided valuable insights and nuance.
2. **Estimating the potential impact** – provide quantitative evidence to indicate which interventions are likely to have the greatest impact on reducing apprentice attrition at a *system level*.

Below is an overview of some possible interventions Te Pūkenga could explore to address apprentice attrition. These are grouped by the opportunity size (see **Appendix 4**: Opportunity sizing model mechanics for details of the opportunity sizing model) and our proposed prioritisation. We then provide a detailed discussion of each intervention.

First-tier priority

What the quantitative evaluation indicates is that the interventions of the highest value and importance should be targeted support in that first year of the apprenticeship.

- **Great Start first year success programme –** the highest priority should be intervening in the first year, as this is when one third of new apprentices withdraw. A first-year programme should encompass both refined delivery and assessment, and enhanced ākonga support.

Second-tier priority

Interventions aimed at ākonga in their second and subsequent years should be done in conjunction with the first-year success programme.

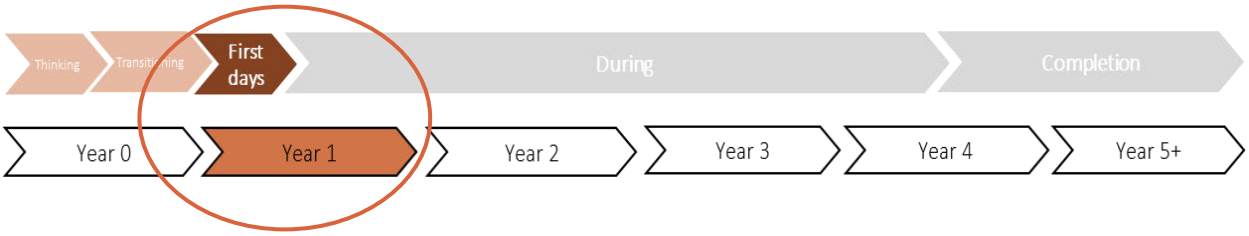
- **Ongoing kaiwhakamana/mentor support programme –** taking a formalised, structured approach to ensure consistent and frequent support for ākonga throughout their programme.
- **Employment/transition bridging –** assisting ākonga to find an optimal employer, and to bridge the transition between employers/WBL divisions/parts of Te Pūkenga as needed.
- **Getting past the roadblocks** – identifying any common assessments/units that ākonga are having difficulty completing and facilitating a way for them to get some support to pass them.
- **Employer support –** understanding what additional support employers may need, particularly those with little prior experience with work-based apprentices, or those flagged as high-risk.

Third-tier priority

- **Completion grants –** providing financial assistance to ākonga close to finishing but for whom there may be financial barriers to completion.

- **Increased promotion of the value of apprenticeships** – ensuring that ākonga understand and appreciate the long-term progression value that a qualification will give them.

1.'Great Start' first year success programme



The problem, reasons and target audience

- 20,000 - 25,000 new apprentices start each year, First year retention rate = 68%. This equates to 6,000 - 8,000 withdrawing in the first year.
- Key reasons:
  - 38% of ākonga note delivery and assessment as a reason for withdrawal
  - 25% note lack of training advisor support
  - 54% note lack of employer support.
- Target audience: all ākonga in their first year of apprenticeship programme.

Thoughts for an intervention

As we have already noted, many of these intervention ideas are not new. In this instance, some of the more administrative activities below were mentioned by Alkema, McDonald and Murray (2016). The importance of relationship and mentoring (especially for Māori and Pasifika ākonga) and support for literacy and numeracy challenges have been identified in a number of studies[8]. We also recognise that some of the WBL divisions have successfully embedded similar activities, although have not bundled them into a cohesive first-year success programme.

Here, the holistic approach we took to this work meant we can provide a different, 'joined up' intervention. We suggest that Te Pūkenga could draw together the following activities from across the three clusters of possible intervention ideas into a cohesive package aimed at first year ākonga.

- Review the resources provided on commencement from a user perspective:
  - "What do I need to do first?"
  - "What do I need to know about the first year?"
  - "What are the on-job and off-job requirements?"
  - "What seasonal-based assessments do I need to plan for?"
  - "How much time should I dedicate to studying each week?"

[8] See for example research from Competenz (2014), Holland (2013), Kerehoma et al (2013), Ryan et al (2017), Tokona Te Raki Māori Futures Collective (2019) referred to in the literature scan section of this report.

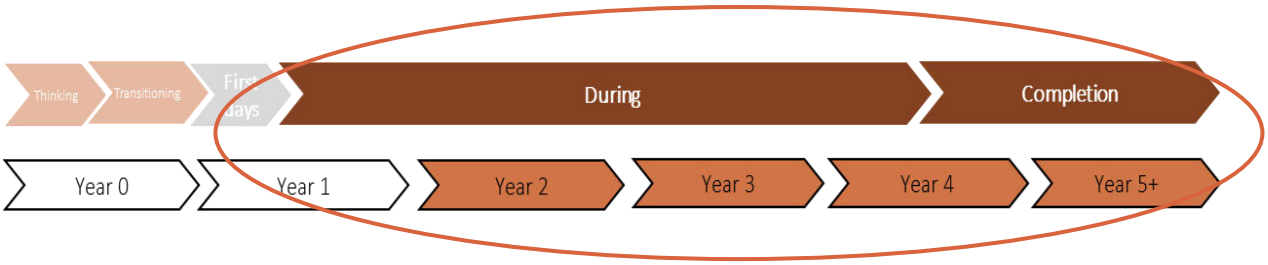
- "Who should I talk to if I have a question about XYZ?"

- Enhance the sense of progress and success in the first year:
  - Develop 'quick win' credits to allow ākonga to achieve in their first month
  - Consider how to create a structured minimum credit achievement plan for Year 1
- Investigate how to embed whakawhanaungatanga to provide even better support:
  - Explore the idea of kaiwhakamana/mentors for ākonga
  - Consider designing a structured set of engagements between kaiwhakamana/ākonga
  - Ensure the first kanohi ki te kanohi meeting with ākonga occurs within first month
  - Refine process for developing learning plan agreements with ākonga and employer
- Consider opportunities to cater to the new demographic Te Pūkenga is attracting:
  - Explore new ways to deliver content for diverse learning styles
  - Investigate new ways to identify and assist with literacy and numeracy needs

Possible next steps

- Research best practice examples of first-year success programmes in the VET sector
- Identify relevant elements that could be scaled up and adopted across WBL divisions
- Develop a pilot.

2. Ongoing kaiwhakamana/mentor support programme



The problem, reasons and target audience

- It can be challenging to maintain momentum throughout the learner journey – especially in complex apprenticeships which can take a number of years to complete
- Key reasons:
  - Lack of support (across a variety of areas – both technical and pastoral)
  - A sense of isolation
  - Feeling like the bookwork is 'too difficult' and that perhaps it 'isn't worth it'
  - Workload

- Target audience: all ākonga

Thoughts for an intervention

Again, we draw together a number of different ideas from the literature, WBL division experts and the findings from this research, and overlay this onto the learner journey as an intervention package tailored at ākonga in their second and subsequent years.

We find that some of the more common factors for withdrawal are within Te Pūkenga's control. To address them, they could, for instance:

- Continue to invest in structured whakawhanaungatanga and kaiwhakamana support:
  - Investigate how to create virtual and in-person 'learning communities' to provide peer support (this is particularly important for women, Māori and Pasifika ākonga[9])
  - Explore ways to deliver more pastoral care benefit with the same resources, such as:
    - New tools to deliver support in different ways (e.g., WhatsApp, Facetime)
    - Better targeting and triaging (e.g., identifying what type of support/mentoring is needed – literacy/numeracy, neurodiversity, Māori/Pasifika, women)
    - Better timing/frequency
  - Review processes for following up withdrawn ākonga within an appropriate timeframe
- Enhance delivery and assessment over the remainder of the learner journey where possible:
  - Explore opportunities to reduce repetition of content, ensure assessments are clear
  - Continue to uncover new ways to deliver content for diverse learning styles
  - Identify common questions around technical aspects of units and explore ways to provide support (e.g. engaging retired assessors to provide online subject matter sessions)
  - Consider ways to increase validity of evidence provided via app so that competence is demonstrated authentically – this could also help to strengthen the value proposition

Considerations

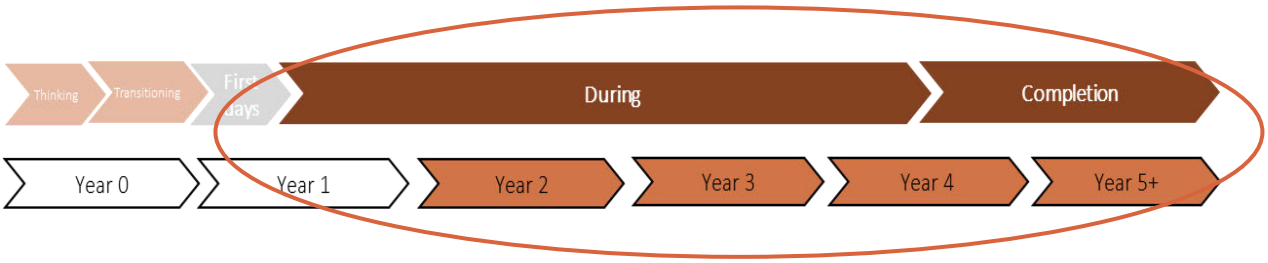
- Ratio of ākonga to kaiwhakamana/mentors will need to be monitored

Possible next steps

- Pilot intervention with ākonga who are in Year 2+ and are considering withdrawing.

[9] See the research by Bridges et al (2022), Competenz (2014), Ryan et al (2017).

3. Employment/transition bridging



The problem, reasons and target audience

- Many ākonga leave their apprenticeship when they change employer (as a result of redundancy, health, relocation or dissatisfaction with support or workplace culture/conditions)
- Key reasons:
  - Inability to negotiate continuing apprenticeship with new employer
  - Not realising that continuing their apprenticeship is possible
  - Unable to find an employer who will take on an apprentice
  - Uncertainty about when they will be able to return to the workforce
- Target audience: ākonga who need to change employers, with directed support for women

Thoughts for an intervention

A number of ākonga we spoke to mentioned they had asked their TA for help bridging their transition between employers, or that they wished this was an option Te Pūkenga provided. We have therefore developed the following possible ideas for an intervention:

- Consider implementing an employment/transition bridging scheme
  - Identify possible ways to provide assistance when a move between employers is necessary (e.g. dedicated team in National Office tasked with following up)
  - Explore processes to flag where an intervention may be appropriate
  - Allow for some flexibility in the length of the transition period between the withdrawal and the continuation, to allow for individual apprentices' situations.
- Explore the provision of additional support for women who may be changing employers (this builds on the recommendation provided in the study by Bridges et al (2022)
  - Support them to find a workplace with other women apprentices
  - Assist them to find a workplace that has a good reputation for supporting women

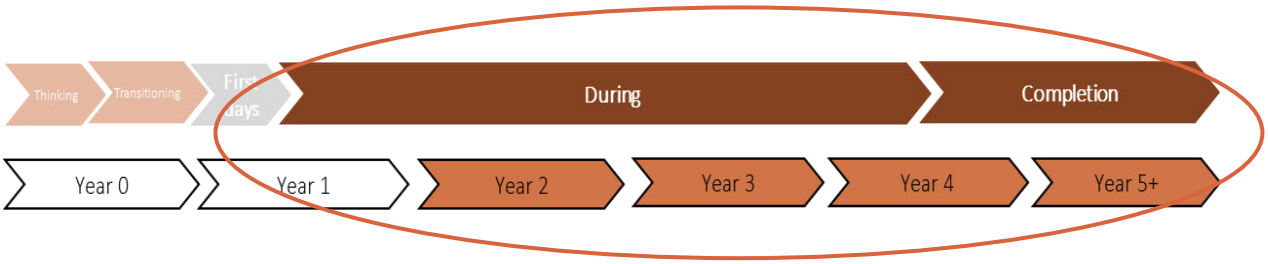
Considerations

- Some ākonga may wish to be able to continue the theory component of their apprenticeship while they are between employers – can this be facilitated?

Possible next steps

- Identify which WBL divisions currently provide this, and assess success rates and scalability

4. Getting past the roadblocks



The problem, reasons and target audience

- There may be some common problematic units/assessments within an apprenticeship that ākonga have difficulty completing during their learner journey.
- Key reasons include:
  - Small and/or specialised companies in particular may find it difficult to provide access to the range of tasks at the point in the course where the apprentice needs to complete them
  - Not all supervisors within the workplace have the technical understanding needed to help ākonga with all assessments
- Target audience: ākonga working in specialised or small companies.

Thoughts for an intervention

Te Pūkenga could offer tailored solutions that allow ākonga to achieve units/credits that they are having difficulty completing in a timely manner. Thoughts include:

- Consider formulating a series of targeted solutions based on the most common needs for each WBL division
  - Explore ways to identify these needs for each apprenticeship
  - Identify possible ways to address these needs and facilitate completion of these assessments/units

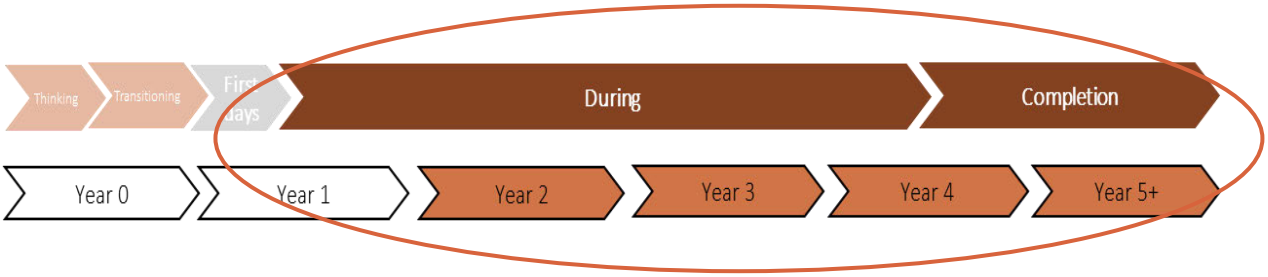
Considerations

- Approach will need to consider context of individual WBL divisions and apprenticeships

Possible next steps

- Select one apprenticeship per WBL division to scan for common assessments not able to be completed.
- Identify potential offerings that could support ākonga to complete the assessment (e.g. bespoke block courses, online workshops/Q&A sessions with a technical mentor).

5. Employer support



The problem, reasons and target audience

- 54% of ākonga mentioned a perceived lack of employer support as a contributing factor in their withdrawal
- Key reasons:
  - employer's capacity and capability to provide on-job training and supervision
  - employer understanding what is required of them.
- Target audience: Employers who are new to employing an apprentice, who have had high withdrawal rates in the past, or who have not previously employed younger people or women

Thoughts for an intervention

In their report, Alkema, McDonald and Murray (2016) discuss in passing the fact that not all employers understand their role in training an apprentice. We therefore suggest that Te Pūkenga explores the possibility of providing enhanced TA support for a targeted group of employers (as above). Activities might include:

- Think about refocusing the TA role on supporting employer capacity and capability
  - Explore individual employer capacity and capability on sign-up
  - Identify opportunities to address any gaps in ability and understanding
- Consider providing short courses or workshops for particular needs
  - Communicating with/expectations of Gen Z
  - Employing women in a male-dominated industry
- Regular check-ins between TA/employer to monitor progress/identify challenges

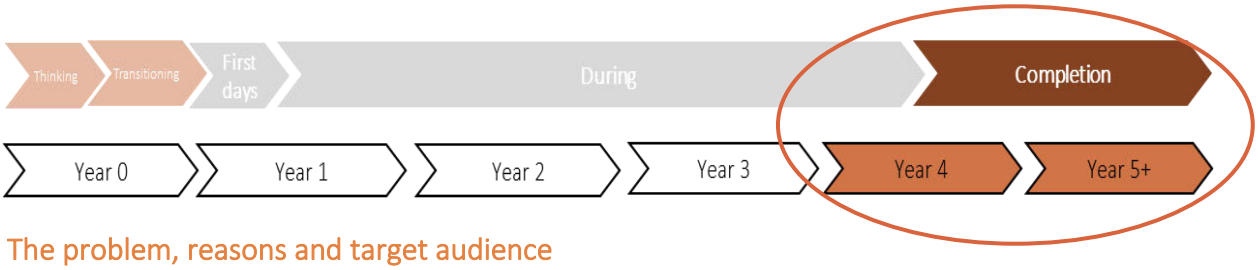
Considerations

- This will likely vary depending on the size and experience of the employer, and the nature of the industry/sector, so will not be a one-size-fits-all solution

Possible next steps

- Design a pilot TA support scheme for small employers who wish to take on an apprentice.

6. Completion grant



The problem, reasons and target audience

- Around 10% of ākonga withdraw with 20 credits remaining.
- Key reasons may be:
  - Change in personal circumstances (e.g. having children, caring responsibilities)
  - Duration of apprenticeship longer than anticipated
- Target audience: ākonga who withdraw near the end of their apprenticeship.

Thoughts for an intervention

Georgia College in the US has a completion grant programme to assist eligible students who are within 80% of completing their qualification and who have unpaid tuition or accommodation fees[10]. Te Pūkenga could investigate funding a similar completion grant when <20% of credits remaining. Areas for consideration include:

- Logistics around applying for a grant and whether/how students would demonstrate need
- Think about equity and transparency, and maintaining dignity

Considerations

- Criteria for awarding completion grants may need to be tailored to each WBL division

Possible next steps

- Analyse the number of withdrawals in the final year for each WBL division, with a focus on the number of credits remaining
- Identify how many of those withdrawals may have been related to fee payments
- Investigate the outcomes of other similar programmes and assess the cost of rolling out.

[10] See https://osfa.uga.edu/types-of-aid/undergraduate/grants/georgia-college-completion-grant/

Quantifying the opportunity to intervene

Figure 9 shows the withdrawal rate of a new cohort projected to start in 2024. What we see is that 8,000 apprentices are projected to withdraw in the first year (assuming a constant first year retention rate of 68%). Second year withdrawals are also high (projected around 5,000). After that, withdrawals occur at a lower rate for the next several years.

This emphasises that intervention in the first and second years will have the largest impact on reducing withdrawals. The extent to which interventions will be effective is yet to be determined.

Figure 9: Timing of withdrawals curve

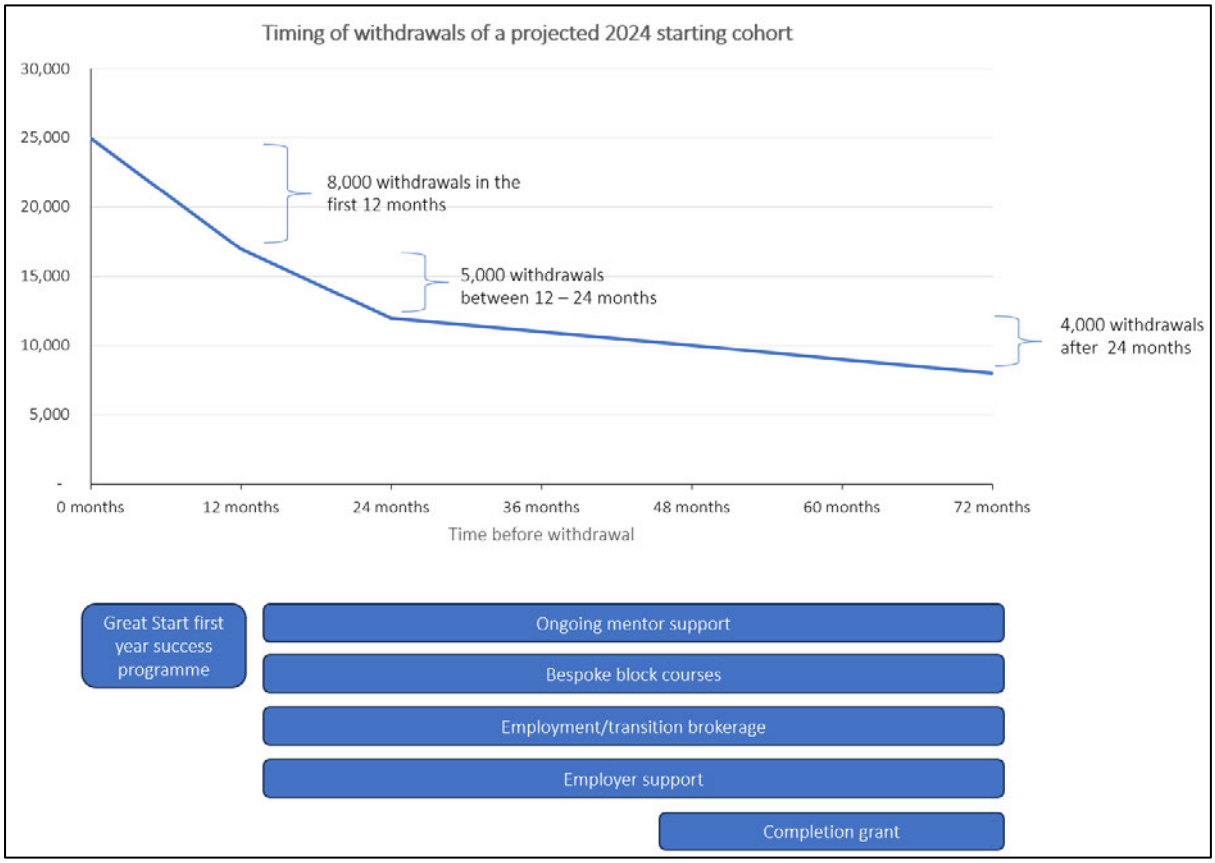


Table 15 shows the size of the opportunity for each intervention idea discussed. The 'Great Start' first year success programme has the greatest potential to prevent withdrawals and has the largest cumulative value over 5 years. In contrast, the completion grant will likely have a low impact. It intervenes on significantly fewer withdrawals and has the lowest cumulative value over 5 years.

Table 15: Opportunity sizing per intervention idea

	Size of target audience		Intervention efficacy			
Intervention idea	% of total reasons for withdrawal being addressed	Number of apprentice withdrawals in one year	Intervention can convince 5% to stay for another year	Intervention can convince 20% to stay for another year	Cumulative value over 5 years ($million)	Intervention priority tier
1. 'Great Start' first year success programme	51%	4,050	203	810	$8.2 – $32.7	Tier 1
2.Ongoing kaiwhakamana/mentor support programme	36%	2,039	102	412	$5.0 – $14.1	Tier 2
3. Employment/transition bridging	34%	1,951	98	394	$3.3 – $13.5	Tier 2
4. Getting past the roadblocks	26%	1,523	76	307	$2.6 – $10.5	Tier 2
5. Employer support	13%	762	38	153	$1.3 – $5.3	Tier 2
6. Completion grant	7%	101	5	20	$0.1 – $0.5	Tier 3

Assumptions:

- Interventions take **5 years** to reach full efficacy (incremental impact each year).
- Value of **$7,000** per learner retained for an additional year.
- Interventions will have varying levels of efficacy at preventing withdrawals. This analysis calculates the impact if interventions can prevent
  - **5%** of withdrawals
  - **20%** of withdrawals.
- Cumulative value is calculated from 2024 – 2030 (i.e. over the five years to reach full efficacy), and is calculated at 5% and 20% intervention efficacy.

Enrolment numbers stay constant at 2022 level (looks like 2023 on track to meet this level).

Conclusion and next steps

We note that considerable research has already been undertaken to understand the reasons and drivers behind apprentice attrition in New Zealand and internationally. We wanted to learn from and build on this work rather than reinventing the wheel. A lot of the ideas we proposed here are not new: they have already been identified in previous research, including that done by the WBL divisions who partnered with us on this project.

What we sought to do was consider how apprentice retention could be increased at the *system level*, through a unified system approach that uses the learner journey as a lens to bundle intervention ideas.

Principles driving this approach included:

- Enhanced scaling of existing interventions with proven success
- More nuanced interventions with better triaging of services to match ākonga needs
- Greater consistency across the system of services and products available to ākonga
- Increased data maturity and evidence-based decision-making.

Here we present the key takeaway messages, some suggested next steps, along with possible further research that we have identified as being of value.

Key takeaway messages

1. The reasons for withdrawals are complex and multifaceted

- Both the literature scan and the interviews point to the complex and multifaceted nature of ākonga decisions to withdraw from their apprenticeship.
- There is seldom one reason: our interviewees mentioned, on average, 2.5 reasons of varying degrees of significance.
- Sometimes the reason they first gave was not the most important, and a deeper underlying reason emerged later in the conversation.
- We found that the reasons for withdrawing are largely the same now as they were ten years ago. That is, an increase in new apprentices in recent years has magnified the problem.

2. System level, employment and personal factors are often deeply intertwined

- The literature scan and interviews highlighted some areas of overlap, particularly between system level factors and employment factors.
- Mapping the reasons against three clusters of intervention ideas, and then against the stages in the learner journey, has enabled us to gain a more holistic understanding of the challenge.
- Consequently, we have been able to demonstrate that addressing one factor may also help to mitigate another.

3. Intervening in the first year is of highest priority

- This research has identified a number of factors within Te Pūkenga's control that, if addressed, will have a significant positive impact on the ākonga experience across WBL divisions.
- As 33% of apprentices withdraw in the first year, it makes sense to prioritise intervention at this time.
- There are opportunities to create bundles of ideas into an intervention package, such as the 'Great Start' first year success programme. Such a first-year programme must have a focus on both refined delivery and assessment, and enhanced ākonga support.

Some of the possible intervention ideas presented here may be difficult to implement and/or require new ways of thinking and doing – we encourage Te Pūkenga to be bold and creative.

Next steps

This research has not sought to dictate a set of designed interventions. Rather, it has aimed to pull together evidence from a variety of sources to help Te Pūkenga understand the reasons behind apprentice withdrawals, and highlight some possible intervention areas.

A number of the WBL divisions have implemented interventions to enhance retention, and we believe these can be leveraged and scaled up through conscious collaboration, learning and sharing.

Next steps for this work could include continued engagement and discussions with each of the WBL divisions providers to refine these ideas. To facilitate this, we have presented a suggested prioritisation for the possible intervention ideas.

Below, we discuss some opportunities for additional research to enhance data robustness.

Possible further research

1. Analysis into apprentice mobility

Analysis of data in the IDI and Ngā Kete has indicated a high level of transience within the work-based apprentice space. That is, we observe a high number of ākonga who enrol in apprentice programmes multiple times, sometimes with different employers, different work-based providers, and/or industries.

Further IDI analysis could enhance our understanding of the degree of mobility in this space – the frequency, success and opportunities to embrace this trend.

2. Analysis into employer support efficacy

It is unclear to what degree the employer an ākonga is with determines their success. Certainly we found evidence that not all employers support their apprentices in the same way, for a variety of reasons: some lack a clear understanding of their role in training an apprentice; some lack the capacity/capability to provide adequate training and supervision; many do not provide the range of practical experiences required. However, a detailed analysis is lacking.

Previous research, including that undertaken by Te Pūkenga Strategy & Ops in 2022, notes that onboarding interventions should be customised to the individual employer's needs (i.e. there is no cookie cutter product).

IDI analysis could be undertaken to explore the different metrics by employer type. This includes metrics such as: Rate of credit accumulation, First year retention, Withdrawal rate each year, Months enrolled before completion.

Characteristics of employers to segment by could include:

- Previous success with apprentices (i.e. have had apprentices complete their qualification previously)
- Business size
- Industry/sector.

3. Evaluation of mentoring models in a New Zealand setting

There is a good body of existing research dealing with mentoring models in education settings. Notably:

- Pilots (e.g. MITO, Te Hiku Iwi Development Trust TUPU programmes for horticulture and plumbing, Akongoue Pasifika horticulture programme)
- International studies (e.g. Georgia State, Australia).

New Zealand pilots are usually quite small and it can be difficult to evaluate success in isolation. It may be worth doing a macro-longitudinal study of these to identify which successful pilots are scalable at a system level.

4. Evaluation of the Fonofale and Te Whare Tapa Whā models

Building on the literature, and in particular the Tokona Te Raki Māori Futures Collective (2019) report, Te Pūkenga could evaluate the integration of the Fonofale and Te Whare Tapa Whā models into selected apprenticeship programmes with Māori and Pasifika ākonga.

This would provide opportunities to develop a pilot which could be used to test and refine a culturally responsive approach, and explore how this could best be scaled up.

Appendix 1: Recruitment email and consent form

Recruitment email text

Share why you left your apprenticeship and get paid $50

Kia ora [name]

You may have heard that Te Pūkenga is wanting to understand more about why people withdraw from their apprenticeships, and has asked the team here at Scarlatti to do some research.

We are contacting people who have withdrawn from BCITO, Careerforce, Primary ITO, MITO and Connexis / Earn Learn apprenticeships in the last year.

Share your thoughts with us in a confidential 15–30-minute conversation and receive a $50 voucher.

We (Scarlatti) are a friendly team of independent researchers. Our work is mostly within the tertiary education and primary industry sectors.

We look forward to hearing from you.

Trudie Walters, Scarlatti Research Manager

[Click though link to registration page]

Registration page text

Tell us why you left your apprenticeship

We want to chat to people like you who have withdrawn from their apprenticeship to ask their opinions and thoughts on their experience. Everything you say will remain anonymous. This will help us learn the reasons why people withdraw from apprenticeships. We are doing this work on behalf of Te Pūkenga as independent researchers. The goal is to improve the experience for future apprentices.

How the conversation works

We will talk on the phone or online (Teams / Zoom / WhatsApp / Facetime) with you for about 15–30 minutes. We will ask you questions about your experience during your apprenticeship. There is nothing you need to prepare, and there are no right or wrong answers.

$50 for your time

We will offer you a $50 Prezzee card for a retailer of your choice.

Contact

The conversation will be with one of our friendly researchers. If you have a question about this project, you are welcome to get in touch.

Trudie Walters	Mobile: 027 258 2084	Email: trudie.walters@scarlatti.co.nz
Julie Moularde	Mobile: 027 956 0275	Email: julie.moularde@scarlatti.co.nz

Register for a conversation now

Fields to complete:

- Name
- Email address
- Phone number

With which ITO was your apprenticeship?

☐ BCITO

☐ Careerforce

☐ Connexis / EarnLearn

☐ EarnLearn

☐ MITO

☐ Primary ITO

☐ Skills

I would prefer that my interviewer is:

☐ Māori

☐ Pasifika

☐ Of any ethnicity

Consent form

I know that:

- Taking part in the project is my choice.
- I can stop taking part in the project any time, even during or after the conversation.
- I will be talking to a team member from Scarlatti.
- The conversation will be recorded if I give my permission.
- My name will not be included in any report that is written.
- I can have a support person with me during the conversation if I want to.

I have read the information about this project and understand what it is about. I know that I am free to ask for more information at any time.

☐ I agree to take part in the project.

☐ I do not agree to take part in the project.

Appendix 2: Interview guide

Introduction

Thank you for taking the time to talk with me today. My name is … and I work for Scarlatti. We got in touch with you because we are looking at opportunities to improve the apprenticeship system. This research is being conducted for Te Pūkenga. We want to hear from people like you who were previously enrolled in an apprenticeship programme but who have withdrawn. We want to understand if something can be done to reduce the number of apprentices who withdraw from their training.

Before we start, I want to make sure that you have read the information sheet and that it's ok if I record our conversation so I can take notes afterwards?

As the sheet says, there are no right or wrong answers, this is a conversation, and we are interested in your honest thoughts and opinions. Everything you tell me will be anonymous – meaning your name or any other information that is specific to you won't be included in our report.

To start with, I will ask you a few simple questions about yourself, and then I'll move onto some questions about your apprenticeship experience.

Ok, let's get started!

Apprenticeship questions

Q1. First of all, what were you doing before you started your apprenticeship?

Prompt: Were you employed? At school?

Q2. Why did you decide to enrol in an apprenticeship at that time?

Prompt: What interested you about it? What made it feel like a good idea?

Prompt: What did you think completing an apprenticeship would enable you to do?

Q3. What did you enjoy about your apprenticeship?

Q4. What made you decide to withdraw?

Prompt: What wasn't working for you?

Q5. How far through your apprenticeship were you at the time?

Q6. Did you talk to anyone about your decision at the time?

Prompt: Did you get advice from anyone?

Prompt: Did you talk to anyone at work?

Prompt: Did you talk to anyone at the training provider?

Q7. If so, what advice did they give you?

Q8. Is there anything you feel that would have made you stay in your apprenticeship and complete?

Prompt: Could your employer have done something?

Prompt: Could your training provider have done something?

Q9. Is there anything you would have done differently yourself?

Q10. Is there anything you wish you had known before you started, that might have made a difference?

Q11. Could you tell me a little about what you are doing now?

Prompt: How long have you been doing that for?

Prompt: Are you enjoying it?

Closing

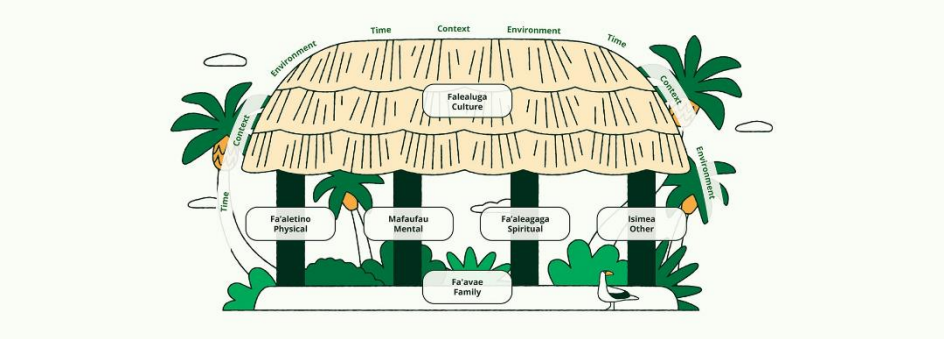
That's all the questions I have, thank you.

As it said in the email, we'd like to offer you a voucher of $50 to say thanks for your time. Would you prefer X, Y, or Z voucher? I'll get that out to you shortly.

[Remember to collect their contact details (e.g., email address if we don't already have it, to be able to send them the voucher.]

Appendix 3: The relevance of the Fonofale model

We wish to thank Emilie Sila'ila'i, our Pasifika interviewer, for providing this information.



A unique and holistic approach

The Fonofale model was created originally as a Pacific model of health, encompassing Pacific cultural values and beliefs from Samoa, the Cook Islands, Tonga, Fiji, Niue, and Tokelau. It was developed by Fuimaono Karl Pulotu-Endemann (1984) to offer a unique and holistic approach to health that highlights the connection between physical, emotional, spiritual and cultural well-being, thereby symbolising the wholeness of a Pacific person. This Pasifika model, not only acknowledges, but fully embraces, Pasifika perspectives and ways of doing and being. It is similar to the Māori model of health, the Te Whare Tapa Whā approach, in terms of being built around the idea of a house, or Samoan 'fale', using the walls, foundation, and roof to represent the different constructs of one's wellbeing.

The Fonofale model is based on the concept of 'fono', meaning gathering, and 'fale', referring to a traditional Pacific dwelling. This framework fosters a communal and inclusive learning environment where experiences and perspectives are valued and incorporated. Hence, since its conception, the Fonofale model has been used in diverse educational settings as a culturally responsive approach to education that promotes inclusivity and cultural responsiveness from a Pacific worldview perspective.

The 'fa'avae' (foundation) represents 'aiga', or family. It encompasses nuclear and extended aiga, as well as other relationships such as marriage, agreement, or partnership. The 'falealuga' (roof) is the culture, beliefs and values, which shelter the family. The four 'pou' (posts) represent physical, mental, spiritual, and other aspects of a person. They connect the culture and family to each other whilst also complementing and interacting with each other. It is important to note here that no part of the fale can stand in isolation, and therefore each piece is needed to make a solid structure. Furthermore, surrounding the fale is a boundary or cocoon. It represents aspects that are external to the individual, namely the physical environment, the period in history, an individual's particular social, economic, political, and legal context. In essence, the Fonofale model emphasises the interconnected of all these dimensions and recognises that all must be addressed to achieve optimal health and educational wellbeing for Pacific learners.

When listening to the stories and journeys of the Pacific apprentices through the use of the 'talanoa' approach, it is both helpful and honouring to try to make sense and to seek to understand their journeys through this culturally responsive Fonofale model. This flexible and adaptable framework can be used in various educational contexts to also provide educators with a valuable tool to create culturally

relevant and engaging learning experiences, and thereby minimise the number of Pasifika apprentices withdrawing from their apprenticeship programmes.

By integrating Pacific cultural values and practices, the Fonofale framework encourages community involvement and collaboration to create a sense of belonging and participation among all members. For example, in instances where the employer and the provider work hand in hand and hand on heart with and for the apprentice, the engagement and perseverance levels of the Pasifika apprentice increases significantly. Where the aspirations of the apprentice are acknowledged, encouraged and rewarded by the employer, the provider and the family, the successful retention of the apprentice is sure to be achieved.

In summary, the Fonofale model is a holistic approach to health and education that emphasises the importance of considering all dimensions of one's being, not just one. It provides a dynamic and adaptable framework that includes factors like age, gender, socio-economic status and sexuality, whilst also valuing the significance of socialisation in Pacific families and communities. Educators, employers and providers can use the model to support Pacific learners by promoting and incorporating culturally responsive practices, family involvement, and community engagement. It serves as a reminder and champions the notion that there are other valuable dimensions of learners that educators need to consider beyond cognitive and mental aspects, which are typical of Western academic thinking.

Practical suggestions for working with a Fonofale approach

Build relationships

Take the time to build relationships with your learners, their families, and their communities. This will help create a sense of belonging and trust, which is essential for a Fonofale approach to be effective.

Incorporate Pacific culture

Incorporate Pacific cultural values and practices into your teaching / assessments. This can include using storytelling, music, and art as well as exploring Pacific ways of knowing and being.

Use a holistic approach

Use a holistic approach to teaching and learning, recognising the interconnection between physical, emotional, spiritual, and cultural well-being. This can involve incorporating activities that address all aspects of the Fonofale model.

Foster collaboration

Encourage collaboration and group work to create a sense of community and inclusion. Provide opportunities for learners to share their experiences and perspectives with each other.

Use flexible teaching methods

Use flexible teaching methods that allow for learner-centred, self-directed learning – do not rely solely on bookwork. This can include using a range of teaching strategies, pairing up apprentices with a peer or mentor, group workshops to address specific content and so on.

Evaluate and reflect

Continually evaluate and reflect on your teaching / assessment practices to ensure they align with the Fonofale approach and the needs of your learners. Seek regular feedback from the learners and their communities to inform your practice.

Appendix 4: Opportunity sizing model mechanics

Overview

The goal of this spreadsheet is to forecast the effect of interventions on withdrawals. To this end, this spreadsheet contains two models of ākonga as they progress through apprenticeships. One is the baseline model, which produces a forecast without any intervention. One is the intervention model, which produces a forecast for the specified intervention. The parameters of the latter model are in part entered into the intervention calculator, a second tab where one can investigate the effects of interventions.

A note on spreadsheet performance

The models used in this spreadsheet are rather large and may run slowly on some computers. Under the formulas tab in Excel, I recommend setting 'Calculation Options' to manual, then pressing 'Calculate Now' whenever you wish to re-run the model (e.g., to see the effects of a new intervention).

Cohort models

The cohort models take the form of two tables: 'baseline_model' and 'intervention_model'. The latter is a copy of the former, with some extra mechanics to model the intervention.

We model apprenticeships by grouping ākonga into groups based on ethnicity, gender, age, presence of disability, apprenticeship duration, and enrolment year. Each of these groups corresponds one row in each model table, and each individual undertaking an apprenticeship will belong to one group only. We then track groups as they progress through their apprenticeships. For each year, we calculate the cohort size (as measured at the start of the year), and the number of withdrawals. This determines the cohort size of the next year, and the number of completed apprenticeships.

Inputs

There are several parameters that affect this model. These can be adjusted at the top of the 'Cohort Models' worksheet. They are:

- The number of new apprenticeships begun each year.
- The base withdrawal rates for each year of an apprenticeship.
- The base rates for each rate of withdrawal (which sum to 100%).
- Withdrawal reason modifiers for ethnicity, gender, age group, disability, and time taken to complete their apprenticeship.
- Withdrawal rate modifiers for each year from 2016 to 2033, reflecting the change in withdrawals rates each year. Notably, this reflects the increase in withdrawals seen in 2022.

Withdrawal rates and reasons

The withdrawal reason modifiers are relative, so a modifier of -100% means that there are no withdrawals for that reason, and a modifier of +100% means that there are twice as many withdrawals for that reason. Furthermore, they are assumed to be independent. Each group in the model is affected by all its relevant modifiers, rather than entering a specific percentage for each group.

Note that the base withdrawal rates for each year of an apprenticeship are different to the actual withdrawal rates. They may be increased or decreased overall by the chosen withdrawal reason modifiers, causing the actual withdrawal rates to be slightly higher or lower.

Decimal numbers

The model tables calculate the expected number of withdrawals and ākonga, and as such there are regularly decimal numbers where one might expect whole numbers (e.g., cohort size, number of withdrawals).

Intervention calculator

The second tab provides the input and output of the intervention model.

Inputs

The inputs provided to specify the target demographic of an intervention are:

- ethnicity
- gender
- age
- presence of disability
- progress through apprenticeship

One can also choose what specific reasons for withdrawal will be prevented by the intervention. The inputs provided to determine the effectiveness of the intervention are:

- timeline, i.e., the proportion of benefits realised each year.
- efficacy, i.e., the percentage of withdrawals – by the target demographic and for the targeted reason – that will be prevented.

Finally, the monetary costs and benefits can be specified by inputting:

- Variable cost
- Annual cost
- Development cost
- Funding return, the amount of funding received for each student in an apprenticeship.

Outputs

The intervention calculator shows the following statistics in tables and graphs to help size the potential impact of an intervention (these are shown for each year from 2021 to 2033):

- Target demographic size per year, without the presence of an intervention.
- The number of withdrawals per year that may be affected by the intervention.

The number of withdrawals prevented by the intervention.