

Pathways, labour market experiences, and learning at work and beyond at age 26

A report from the Competent Learners project

Cathy Wylie and Karen Vaughan

Pathways, labour market experiences, and learning at work and beyond at age 26

A report from the Competent Learners project

Cathy Wylie and Karen Vaughan

AUGUST 2019

ISBN 978-1-98-854270-6

New Zealand Council for Educational Research
PO Box 3237
Wellington
New Zealand

www.nzcer.org.nz

© NZCER 2019

Acknowledgements

We are deeply grateful to those who took part in this final phase of the longitudinal Competent Learners study, and your openness to sharing your journeys and lives with us.

We are also very grateful for the statistical analyses used in this report, from the work of former colleagues Rachel Felgate and Edith Hodgen, and current colleagues Melanie Berg and Elliot Lawes, and to the resourceful and dedicated fieldwork team led by Sally Robertson, then Rachael Kearns, with Paul Kearns, Jaqui Thomson, and Wayne Perkins. We are appreciative of David Earle's abiding interest, thoughts, and the access to qualifications data held by the Ministry of Education, and critical review from Heleen Visser and Dinah Vincent.

The final phase of the Competent Learners study was funded by the Ministry of Education through Te Pae Tawhiti (NZCER's Government Grant), and NZCER.

Contents

Acknowledgements	iii
Summary	1
Qualification levels	1
Work is important	1
Learning continues	2
What would they change if they could go back in time?	3
1. Learning and work in emergent adulthood	4
A braided river: The flows of learning and work in emergent adulthood	5
Flows to employment	6
Experience was not limited to formal learning and work in New Zealand	7
Learning, work, and hindsight	7
2. Experiences of learning since school	8
Formal learning: Now and since leaving school	8
Informal and non-formal learning	11
Approaches to learning	13
3. Formal qualifications gained by the end of 2013	16
Formal qualifications gained by the end of 2013	16
Unemployment and gap time by age 20, what people were doing at age 20, and qualification levels	19
Motherhood, gender, and qualification levels	20
Qualifications and study for the sub-group of 274	20
Fields and places of study	21
4. Do qualifications and occupations match?	22
Occupations and paid work arrangements	22
Match of qualification levels and occupational groups	23
Match of qualifications and occupations	23
5. Paths to work	26
The lead-in to current paid work	26
Participants currently not in paid work	29
6. Experiences with work	30
Work is foremost	30
What is work like?	30
7. Learning opportunities at work	38
The workplace as a learning environment	39
Nearly a third would like more workplace learning opportunities	43
Becoming more effective: Significant learning experiences at work	44
8. Hindsight	47
Advice to a younger self at school	47
Advice to a younger self when working out what they wanted to do as an adult	48
Hindsight around looking for work	50
9. Discussion	51
References	52

Figures

Figure 1	Braided river of pathways for Competent Learners group from post-school to age 26	5
Figure 2	Growth in learning capacity since age 20	13
Figure 3	Most common approaches to learning	14
Figure 4	Approaches to learning—items with a wider range	15
Figure 5	Early family income and highest New Zealand qualification by the end of 2013	18
Figure 6	Maternal qualification and child’s highest New Zealand qualification by the end of 2013	19
Figure 7	Purposeful and satisfied alignment	32
Figure 8	Worthwhile and secure	33
Figure 9	Good workplace relations	33
Figure 10	Occupational category and agreement levels for the Purposeful Alignment factor	35
Figure 11	Occupational category and levels of agreement with the Worthwhile and Secure factor	36
Figure 12	Occupational category and levels on the Good Work Relations factor	37
Figure 13	Experience of supportive conditions for workplace learning	41
Figure 14	Experience of good conditions for workplace learning	42
Figure 15	Occupational differences relating to Learning-enabled workplace factor	42

Tables

Table 1	Benefits from formal learning after leaving school compared with benefits from formal learning at age 26	10
Table 2	Benefits from informal learning over past year, compared with expected benefits from current formal learning	12
Table 3	Highest New Zealand qualification level by the end of 2013	17
Table 4	Highest New Zealand qualification level by the end of 2013 in relation to main activity at age 20	20
Table 5	Highest New Zealand qualification level by the end of 2013 for the Pathways group	21
Table 6	Match of qualification area with occupation	24
Table 7	Match of qualification level and occupation	24
Table 8	Influences leading to 26-year-olds’ current work	27
Table 9	How 26-year-olds found their current job	28
Table 10	Factors and items related to age-26 work experiences	31
Table 11	Structured learning in the job	39
Table 12	On-the-spot unstructured learning in the job	39
Table 13	Learning-enabled workplace factor	40

Summary

The Competent Learners cohort typically had “well lit” paths (Patterson, 2011) to traverse in their journey from school into adulthood. The average income and qualification levels of the families in this Wellington region group were higher than the country as a whole. Most left school with at least NCEA Level 2. So how this group fared in their journey from school can tell us what that journey can look like for those for whom, in theory, it should be the most straightforward.

Pathways from school for most of the Competent Learners cohort to age 26 usually included continuing formal learning, often combined with work. Those who went from school to employment usually stayed in full-time work, though some added formal study by age 26. Those who took gap time before the age of 20 were least likely to return to formal study after age 20.

Gap time after the age of 20 was common (42%), mainly to travel, but also to work: a third of the group had worked overseas by the time they were 26. A quarter who took gap time said it changed their minds about what they wanted in life.

A fifth of the cohort were studying at age 26, primarily for work or a career they could not get without (additional) qualifications, or to widen their options.

Qualification levels

All but 5% of the cohort had some qualification. Forty-three percent had a university degree, 14% a level 4–6 certificate or diploma, 10% a level 1–3 certificate, and 28% NCEA (mostly Levels 2 and 3). Over a third (107 of the 274) had more than one qualification.

When we compared NCEA achievement by the end of school and post-school qualifications, we found that some with NCEA Level 1 or 2 had gone on to get a university qualification (6% and 15% respectively, compared with 67% of those with NCEA Level 3). Those with NCEA Level 1 only were most likely to gain level 1–3 certificates (29%, compared with 12% of those with NCEA Level 2 and 4% of those with NCEA Level 3).

Highest qualification levels reflected early family resources: young people who spent their early childhood in middle or high-income homes were twice as likely as those who spent it in low-income homes to achieve a university qualification. The higher their mother’s qualification, the more likely it was that they would gain a university qualification.

Work is important

Almost all the 274 people we focus on in this report thought that enjoying work, doing well at it, and having fulfilling work was very important or important. Work topped the goals they had for the next 3 years of their life.

At age 26, 84% were in paid work, usually full-time, in permanent jobs. While 82% said they had a straightforward path to their current job, this was on the back of other jobs: the median number of jobs they'd held since age 20 was 4.5, and the median number of jobs in the past 3 years was two. Just under half had known periods of difficulty finding work.

Sixteen percent were not in paid work when we interviewed them. Most of these had been in paid work over the past 5 years, and most had formal qualifications, including university degrees. Just over half of this group were actively seeking work, with the rest parenting or in full-time study, and some with ill health or travelling.

Half those in work could think of something they wished they had known earlier as they looked for work. This included acting more confidently, having more persistence and resilience, making a good CV and learning good interview skills, taking a broad approach, being open, and networking.

Formal learning since school was the most common pointer to their current work (44%). Just under 30% cited their hobby, friends or family, or previous experience in the work. Twenty percent mentioned the availability of the work, and 15%, opportunities. Very few mentioned careers resources or advice.

Most were positive about their experiences in their current job: it was interesting, worthwhile, and used their skills. Most saw their current job as part of a longer term career: and not necessarily what they would keep doing. Just over half thought this job was related to the areas they had studied. Thirty-nine percent thought they had needed their highest qualification to get the job.

Learning continues

Learning certainly didn't stop with school, or even with the end of post-school formal learning. Most of the cohort were learning at work, and informally.

Learning capabilities had grown since age 20. We found that, at age 26, this group was more likely to find a way to make things more interesting to learn, and to keep working on finding a way to solve a problem. They were happier to ask for advice or help when they weren't sure how to do something, and to think "outside the square", finding new ways to do things or solve problems.

Post-school formal learning gave benefits that were life-related as well as job and qualification-related. Most spoke of gaining a better understanding of things that interested them, knowledge or skills for living, a chance to think of what they really wanted to do in their life, as well as new friendships and networks or contacts for non-work interests.

But just under half had some regrets or disappointments in their post-school formal learning. These regrets were particularly around starting formal post-school education without really knowing what they wanted to do; or not completing a programme.

Nearly two-thirds of the 26-year-olds engaged in some form of informal learning in their everyday life. This included practising skills with a goal in mind, taking part in group activities (including sport, reading, talks, watching things, and—to a lesser extent—experimenting), voluntary work, or seeing how things worked.

Often this informal learning gave them similar kinds of benefits as they gained from their post-school formal learning.

At age 20, this group had high expectations that work would include ongoing learning. At age 26, most had some structured learning on the job in the form of feedback, and less often through workshops or seminars, scheduled mentoring, or keeping a regular record. A third had regularly scheduled classes or skills practice sessions.

Unstructured learning on the job was more common: through discussions, observing others, and reading. Just over half also gained knowledge by talking with people who did similar work in other workplaces.

Particularly significant learning experiences at work related to communicating with others; rising successfully to challenges; taking opportunities to be extended; and learning from near misses, mistakes, and accidents.

Most had good conditions for workplace learning and thought they had enough access to information and support to learn in their workplace. Nearly a third would like more learning opportunities at work, to develop particular capabilities for their present work, or to enable them to progress into other roles in the same business.

What would they change if they could go back in time?

Over half the 26-year-olds could think of some things they wished they had learnt or known what to do when they were at school. Mainly this was related to taking school more seriously. Some wished they had been more confident to follow an interest rather than take the path they or others thought they should take. Life skills and practical skills, and having better information and advice about careers or study, were also mentioned.

Only 19% of the cohort could think of no advice they wished they had when working out what they wanted to do as an adult, either because they had always known what they wanted to do and had followed that through, or because things had worked out well. Most had to discover or make a match between themselves and work options. They wished they had explored options more, been more open to change, followed their interests more, or been more confident or persevering.

So even a “well lit path” from school into adulthood has to be made by each individual; the paths are often not straightforward, and rely on continual openness and learning.

1.

Learning and work in emergent adulthood

This report describes the learning and labour market experiences of 274 young adults at age 26, and the paths they took into adulthood. These young adults were part of the Competent Learners cohort study, which has followed a group from the Wellington region since near age 5. The study's focus was on how children's and then young people's experiences in and out of formal education contribute to their educational performance, and also their wellbeing.

The study began by looking at the contribution of early childhood education to the development of competencies thought to be important to becoming lifelong learners.¹ Hence, the sample was centred on different types of early childhood education and those engaged in it. The Competent Learners sample reflects the Wellington region where the study was carried out and, compared to the national average, has higher proportions of people from high-income families and whose mothers have tertiary-level qualifications. It also has lower proportions of Māori and Pacific people.

Many of this Competent Learners cohort did well at school (56% gained NCEA Level 3),² and most went into tertiary education, often university. This group is interesting because it offers insights into the expectations, opportunities, and experiences built around what Patterson (2011) called the “well lit” pathway from school to ongoing learning and the labour market.

The young adults whose experiences and views form most of this report were those for whom we had a full set of the material we collected in 2015 in the age-26 phase of the study: an online survey, and a structured telephone interview, and qualifications data via their National Student Number (NSN). We also describe the post-school qualifications gained by 2013 by the larger group of all 401 who took part in the earlier Competent Learners study at 20, and how they relate to their NCEA levels, and early family income and maternal qualifications.

The picture in this report is largely quantitative, with some sections where we draw on the young people's own words about their experiences, and what they would like their younger self to have known.

1 The study began with near-5-year-olds in their final early childhood education service, with a next phase of data collection after their first year at school, when they were 6. At this stage, the study was called *Competent Children*. Subsequent phases occurred 2-yearly, when they were aged 8, 10, 12, 14, and 16, and then at age 20, and 26. Reports from the study are available at <https://www.nzcer.org.nz/research/competent-children-competent-learners>

2 This is higher than the 2009 national figure of 42% for school leavers. <https://www.educationcounts.govt.nz/statistics/indicators/main/education-and-learning-outcomes/1891>

A forthcoming companion qualitative report, *Learning, working, and building a sense of belonging in emergent adulthood*³ returns to 19 of the 29 young people Patterson interviewed when they were 21, who had taken “less well lit” paths from school, such as leaving school early, becoming young mothers, or heading into adulthood without school qualifications.

Alongside these two reports, and focused mainly on labour market experiences and learning in and out of work, *Shaping Adulthood*⁴ reports on the 26-year-olds’ relationships, values, and experiences, and what has changed since age 20, using material from all those who filled out the online survey ($n = 323$) and were then interviewed ($n = 303$; not all those who filled out the online survey also did the interview).

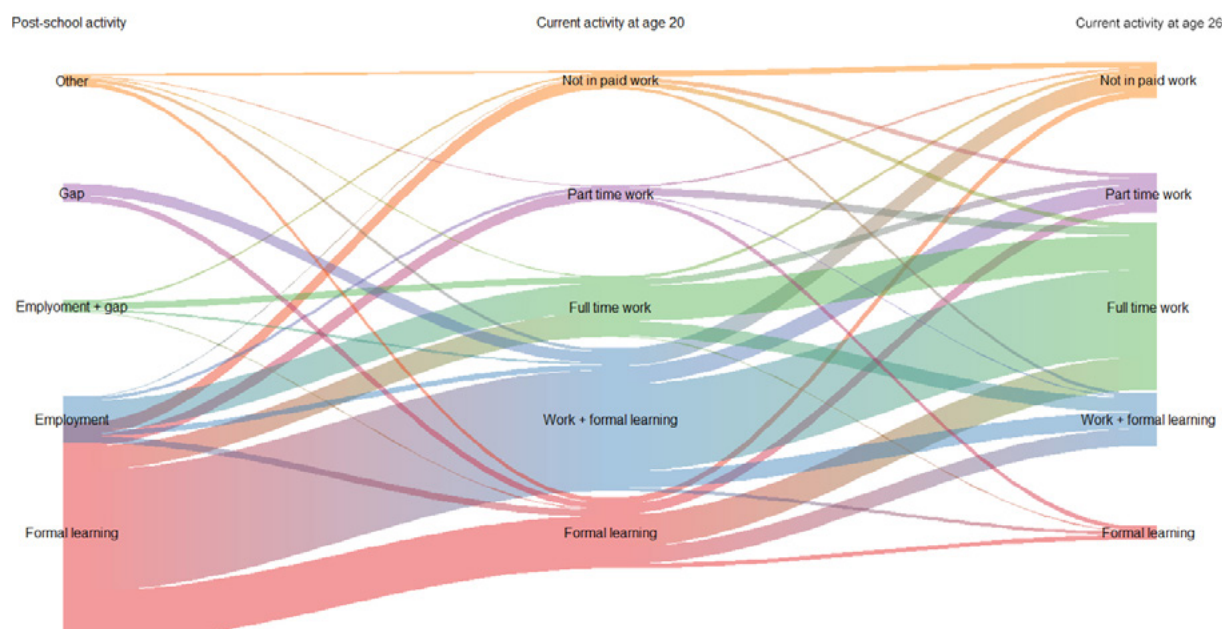
A braided river: The flows of learning and work in emergent adulthood

Figure 1 illustrates these young adults’ transition since school. It deliberately uses the look of a braided river—rivers that flow over gravel floodplains in an ecosystem linking the mountains and sea, with networks of varying channels, separated by small, often temporary, islands. The braided river metaphor has been used to imagine an ecosystem of pathways through the education system (Middleton, 2014) and labour market (Buchanan, Wheelahan, & Yu, 2016), or in relation to youth development work (King, 2015). It is an ecosystem that features multiple and flexible channels, with different entry and exit points, and options for channel crossovers or pauses on an island.

Our braided river in Figure 1 shows the flows of activity within education and employment for these 274 young adults (157 female and 117 male).

Each of the three columns of labelled points in the “river” is based on data collected at age 20 and 26. Column 1 is based on asking retrospectively at age 20 about their main activity in the 2–5 years since they left school, and column 2 is based on asking about their main activities at age 20. Column 3 is based on asking about their main activities at age 26.

FIGURE 1 Braided river of pathways for Competent Learners group from post-school to age 26



³ Report will be available at <https://www.nzcer.org.nz/research/competent-children-competent-learners>

⁴ See <https://www.nzcer.org.nz/research/competent-children-competent-learners>

Column 1 shows that tertiary-level formal learning was the main activity for this group between the ages of 16 and 20, but often alongside part-time work (column 2).⁵ This is pretty much what the group predicted for themselves when we asked at age 16 (in 2007). Responding to a list of possible activities for their first year after leaving school,⁶ most (75%) expected that they would study at a university and would work part-time (51%). Polytechnic study was identified by 15%, and Private Training Establishment (PTE) study by 11%. Some expected to be working full-time (15%) or “earning while learning” (17%).

At age 26 the majority (230 out of 274, or 84%) were in paid work and 88% of these had just the one job. This work was usually full-time (76%), permanent (79%), and as an employee (85%) rather than as a contractor or business owner.

Twenty-one percent were engaged in formal study leading to a qualification, just over half of them full-time. University courses were being taken by 57% of the studying group, and 24% were taking polytechnic courses leading to a qualification. Other formal study undertaken was industry training through their employer (9%), industry certification through distance education or a PTE (9%), and 5% were apprentices.

A few were in formal learning solely (no paid work), with more than half of those continuing their formal learning from age 20.

Looking at the patterns of flow, we see that most of those whose main post-school activity was formal learning were in work and formal learning at age 20, and full-time work by age 26. Some of this group stayed learning without work, with most of these in full-time work by age 26. Some of this group were in full-time employment at age 20, but returned to formal learning at age 26, combining it with work.

Most of those who were mainly employed post-school stayed in full-time work at both age 20 and 26, but some moved to part-time work by 20 before rejoining full-time work—or returning to formal learning at 26.

If people who were in full-time work at 20 returned to formal learning, it was usually in combination rather than full-time formal learning. Those not in paid work at age 20 mostly had work by age 26, some combining it with formal learning.

There are some interesting patterns for those who had “gap” time after they left school. Those who said that this had been their main activity since leaving school were mostly combining work and formal learning at age 20, or in formal learning, but quite a few were not in paid work at age 26. Those who spent most of their time between leaving school and age 20 in both employment and taking gap time were mostly in work and formal learning at age 20, but some were in part-time work or not in paid work by age 26.

Flows to employment

This group came into the workforce shortly after the 2008 global financial crisis, and their path was not without periods of difficulty in finding work for 47%.

Few had gone straight from tertiary study to their current job. The median number of jobs the young people had had since age 20 was 4.5, and in the past 3 years, two jobs.

Most participants reported an unproblematic time getting into their current job, reporting the path as being straightforward (42%) or very straightforward (40%). Some reported problems: “a few twists and turns” for 16% and a “messy/difficult” path for 1%.

5 This graphic was created by working backwards from the 274 participants at age 26. We do not know with certainty what everyone did immediately after leaving school, but we know what they reported at age 20 looking back and we have been able to infer activities from other things we know about them.

6 Responses did not add to 100% because people could choose multiple responses and, in some cases, did not respond to the item at all.

Another NZCER study following around 120 young adults over 5 years from school, through army training, apprenticeships, youth training, and university, showed that they creatively *produced* their pathways as much as following the formal further learning pathway they initially embarked on. How they produced their pathway—the “production values” they brought to it—were based in different patterns of engagement with identity and career (Vaughan, Roberts, & Gardiner, 2006).

The Competent Learners cohort had a more “well lit” pathway but they, too, needed to make choices, try things out, and realise what they valued most, as well as what was possible in a very diverse set of occupational options which usually branch out into further pathways, rather than end in still ponds.

Experience was not limited to formal learning and work in New Zealand

At age 16, almost half (49%) expected to travel in their first year after finishing school. By age 26, 86% of this group had travelled beyond New Zealand, and 40% had worked overseas. Some had spent just a few weeks overseas, and some, years. The median length of time spent overseas was 5 months. Just over a third had worked in another country. When we interviewed them, 20% of the group were living outside New Zealand. Interestingly, most of those in New Zealand were still living in the Wellington region where they were first recruited for this study.

Quite a few (42%) had also taken some “gap time” between the ages of 20 and 26. Gap time—away from what they thought of as their main channel of becoming an adult—was mainly in the form of travel (64% of those who took it). It also included “chilling out” (30% of the group that took gap time), holidays (30%), paid work (24%), voluntary work or internships (14%), and looking after family (14%).

Gains from this “gap time” fed into their development over and above relaxation or having a break. The 26-year-olds who took this time also spoke about learning a lot about themselves, how to communicate with different people, handle different situations, learning new skills, and what they really valued. A quarter of those who took gap time said it changed their mind about what they wanted to do in life. A few found it made them restless.

Learning, work, and hindsight

Learning continued to be a strong strand in their lives, both in and out of work. We turn next to look at what their experiences were in formal and informal learning, followed by the picture of their formal qualifications, and how these relate to their NCEA and equivalent qualifications and early family resources. Next we explore the question of how well their qualifications matched the young people’s work. We take a closer look at the work they were doing, and how they came to that work. We touch on the experiences of those currently not in paid employment. We then learn about experiences of life at work, and differences related to kind of occupation. Hindsight can be a useful teacher, and advice the young people would give their younger selves is the focus of Section 8. We end with a discussion of what these perspectives and pathways suggest about the opportunities and supports provided at school and beyond.

2.

Experiences of learning since school

In this section, we describe learning outside work. Learning is central to the Competent Learners project. The overarching aim of our questions was to inquire into the idea that young adults are (ideally) lifelong learners. We were not only thinking about them achieving employment but on their development of *employability* over a lifetime, as well as their capabilities for a satisfying life in general.

We therefore took lifelong learning to be about two things. First it is about people's officially registered actions and outcomes (e.g., engaging in learning programmes and gaining qualifications). Secondly, it is about people's strategic orientation to the potential for, and deployment of, learning. As a mindset, the latter has been described as "the ultimate life skill for the 21st century" (Burgogne, 1998, cited in Carr & Claxton, 2002, p. 9) because it seems so vital in a rapidly changing world and global labour market.

As the Competent Learners participants left school and moved into tertiary education and workplace learning, we have been interested in their engagement with learning in its multiple and different forms:

- *formal* (with a designated teacher and prescribed curriculum and outcomes, and leading to a recognised qualification)
- *non-formal* (organised and intentional, with or without a teacher, but not leading to qualifications)
- *informal* (based in everyday life).

For the purposes of interviewing participants, we used terms with which they would probably be more familiar—"formal learning leading to qualifications" and "learning in the workplace". In recognition of the latter's rich potential for learning, we asked specifically about activities that were structured and scheduled, or unstructured and on-the-spot. Here we start with formal learning, then look at non-formal and informal learning together. We end this section with a picture of the young people's reports of what they enjoy about learning, and how they like to approach it.

Formal learning: Now and since leaving school

Nearly everyone (91%) in the group of 274 young adults had engaged in formal learning since leaving school. Some were doing so now for the first time. We asked those who had never engaged in formal learning why they had decided not to do so once they left school. Of these 30 young people, some said they had a job without the need for any more education ($n = 12$) and some said they were not sure what

they wanted to do or to enrol in ($n = 9$). Some had children. Some were not sure what to do. A few said they hated school or didn't like studying. A few said they couldn't afford further study or didn't like getting into debt in order to study.

I planned on having a year off, and then I started working and decided I wanted money more than study.

I wasn't sure what I wanted, so I went straight into work.

There was nothing that I had enough interest in learning to continue after school.

I don't learn out of books.

I was a young mum and couldn't afford it [study].

Current formal learning

Twenty-one percent of the group of 274 were *currently* engaged in formal learning ($n = 58$) at the time of their interview around age 26. Just over half of these ($n = 33$) were in university-based programmes towards a degree or diploma. Fourteen were in an Institute of Technology or Polytechnic (ITP) programme towards a national certificate, degree, or diploma. Five were doing industry training with their employer towards a national certificate or diploma. Another five were doing industry certification through distance education or a PTE. Just over half of the formal learning group was engaged in it full-time.

Work opportunities were the main reason why these 26-year-olds were undertaking formal study.⁷ Fifty-three percent could not get the work or career they wanted with their existing qualifications. Women reported this more than men (65%, compared with 33%). Twenty-eight percent wanted to widen their options. Formal learning was part of their job for 15%. Another 5% had found they could not get work without some qualification, and 2% had not completed their original qualification course.

Other reasons for undertaking formal learning were interest in the area (35%), that they would get bored if they stopped learning (7%), or that it was important for their identity (5%).

Some illustrations of their reasons for studying for a qualification at age 26:

I'm thinking about studying nursing or midwifery—and this [course] would help me get into these courses as I didn't do any sciences at high school—so it's like a bridging course.

Because I didn't study after school, so I'm studying now to improve my job opportunities. I have been working for many years. I would like to get a satisfying job that I can think in and enjoy, and you need a degree to do that.

I really like art and want skills for illustration work.

I've been managing retail stores and just found I came to a dead end ... so I'm studying to widen my options.

I want a career now. I travelled for 2 years, I worked for 2 years before I started my degree.

Most were satisfied (78%) with their current formal learning and 14% were a mix of satisfied and unsatisfied. Two were dissatisfied.

We asked those who were satisfied and partly satisfied about whether they had experienced any of a possible list of benefits from their current formal learning. We also asked everyone (whether currently in formal learning or not) about the same possible benefits in relation to *any* formal learning they had done since leaving school. Table 1 below compares the possible formal learning benefits since school and at age 26, grouping them by whether they are job and qualification-related or broader and life-related.

On the whole, there are similar patterns (the slight differences in percentages are not statistically

⁷ Over a third of those with annual incomes of \$30,000 or less were currently engaged in formal learning.

significant). Those *currently* engaged in formal learning were slightly more focused than others on qualifications for entry into a particular field or job, and gaining networks or contacts useful for work. They reported broader and life-related gains a little less. This may be because they were asked about the benefits from just one formal learning programme, rather than formal learning over some years, when they were also actively engaged in finding their way as adults.

TABLE 1 Benefits from formal learning after leaving school compared with benefits from formal learning at age 26

Benefits	Benefits from formal learning between leaving school and age 26 (n = 243) %	Benefits from formal learning at age 26 (n = 58) %
<i>Job and qualification-related</i>		
Specific knowledge or skills that may one day be valuable in a job	96	89
A qualification for entry to a particular field or job	80	87
A qualification that can be used in other countries	81	83
Specific knowledge or skills for my job	Not asked	62
Networks or contacts useful for work	69	74
A qualification for entry to another learning programme	79	74
<i>Broader and life-related</i>		
A better understanding of things that interest me	94	83
A chance to think about what I really want to do in life	87	81
Networks or contacts useful for non-work interests	65	57
Knowledge or skills for life now	89	76
New friendships	85	66

Those whose highest qualifications were NCEA were less likely than others to see gains from their formal study since school in relation to work or further study. A third of these young people had not completed their post-school courses.

When we asked those who had done some formal learning post-school if there was anything else that stood out for them about what they had gained, some common themes were gains in understanding, in thinking, in writing and other ways of showing understanding or producing knowledge, in being organised and persevering, and becoming independent. It gave them some close relationships as well as useful networks. Post-school formal learning also gave young people more clarity about what work they wanted or could do (not always what they initially chose or got their first qualification in).

Regrets about formal learning

Just under half of those who had engaged in formal learning since school (112 of the 243) reported some regrets or disappointments about their formal learning. Fifty expressed regrets about not really knowing what they wanted and having chosen the wrong programme or gone into tertiary education (usually university) before they were ready, describing themselves as “naive” or “just jumping in”. The following quotes illustrate some of the comments, including a vague sense of dissatisfaction for some:

It would have been good to get more knowledge of career paths and get more knowledge from university about careers.

I regret that I didn't do a wider variety of courses at the start, explore more options. I probably pre-judged some courses which in hindsight might have been more valuable.

The options I chose, I wonder if it all could have been different. I question the opportunity lost. I wonder what could have been.

The degree I did didn't lead to a particular job—a BSc—which was too unspecific. I felt somewhat pressured by parents and social pressure to go straight to uni. I wish I'd taken more time to consider options.

I wish that I had begun my Bachelor of Arts later rather than starting straight out of school. I think I would have approached uni work with a more mature attitude. I treated the uni work like a chore, like I did with schoolwork. Maybe travelling before studying would have helped in that way, helping me grow up a bit.

I wish that I hadn't done what I did back then. They were just certificates and I wish I had done something more significant. I didn't know what I wanted to do, and they were certificates that weren't really going to get you anywhere.

Twenty-three comments described regret at not completing their programme. Some wished they had had more knowledge about what they could do, and what their choice meant in terms of what was covered and where it could lead in terms of paid work. Some wished they had taken programmes with a broader focus; others wished they had taken programmes with a narrower or more specific focus. Several wished they had gone on to do an Honours year in their degree. Others regretted doing a course that did not really interest them or had not been well considered. Some regretted not taking it seriously enough or doing enough work. Several regretted having had poorly taught courses.

Informal and non-formal learning

Nearly two-thirds of our group reported engaging in some informal learning over the past year. This is three times the number engaged in formal learning. The informal learners had gained new skills or knowledge through:

- practising a skill with a goal in mind (55%)
- taking part in things with other people, such as sports, discussions, group projects (49%)
- reading (47%)
- talks, seminars, or workshops (47%)
- watching, such as YouTube or DVDs (39%)⁸
- trial and error or experimentation (22%)
- voluntary work (19%)
- taking things to bits or working out how something worked so they could fix it (11%).

⁸ Women mentioned this more than men (48%, compared with 27%).

Also mentioned were looking things up on the internet, podcasts, online courses or tutorials—including MOOCs⁹—courses, talking to people, or being shown things by others.

Table 2 compares benefits reported by those in *formal* learning now with benefits reported by those who had done *informal* learning over the past year. Learning in both spheres gave knowledge and skills related to work, though formal learning gave more job-related networks or contacts. Informal learning at this age gave somewhat more knowledge and skills for life, and more non-work networks or contacts. Formal learning towards a qualification at age 26 gave those who were engaged in it somewhat more of a chance to think about what they wanted to do in life. However, this was still a benefit for a high proportion of those engaged in informal learning. This perhaps reflects on this period around age 26 as one of continued exploration and self-development.

TABLE 2 Benefits from informal learning over past year, compared with expected benefits from current formal learning

Benefit	Informal learning (n = 178) %	Formal learning (n = 58) %
<i>Specific and job-related</i>		
Specific knowledge or skills that may one day be valuable in a job	90	89
A qualification for entry to a particular field or job	Not asked	87
Something (informal) or qualification (formal) that can be used in other countries	87	83
Specific knowledge or skills for my job	65	62
Networks or contacts useful for work	57	74
A qualification for entry to another learning programme	Not asked	74
<i>Broader and life-related</i>		
A better understanding of things that interest me	89	83
Knowledge or skills for life now	88	76
A chance to think about what I really want to do in life	73	81
New friendships	69	66
Networks or contacts useful for non-work interests	67	57

Twenty-four participants in informal learning also commented on using it as a way to get ahead, seeing a link between informal learning or volunteer work and employability enhancement—for example, gaining mediation or public speaking skills. Another fourteen described enjoying following up on interests or hobbies, with a few mentioning a link to employability. Two mentioned financial benefits with low-cost courses that allowed them to negotiate for a higher pay rate.

Twenty commented on enjoying the method or approach involved—for example, being able to choose when and where you learnt and being able to follow up something you were genuinely interested in. Some commented on how informal learning was “a whole lot of fun” and “way more interesting” because you could do whatever you wanted.

⁹ Massive Open Online Course, open to anyone.

Another 20 referred to gaining life skills—for example, in dealing with stress, financial management, learning to look after their health better, developing confidence, and learning cooking skills. Fifteen described using informal learning as a way to broaden horizons and explore themselves and their place in the world—for example, “re-evaluating priorities”, “finding out what I value in life”, getting “life perspective” and “participating in community”.

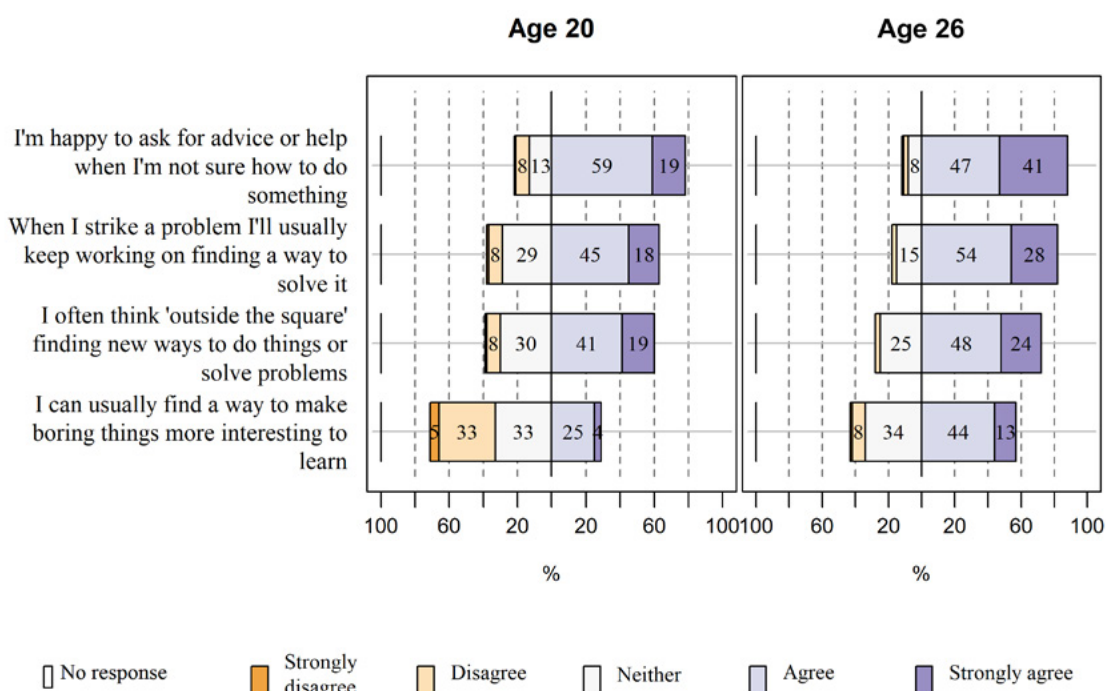
Approaches to learning

The *New Zealand Curriculum’s* vision is “young people who will be confident, connected, actively involved, lifelong learners”.¹⁰ While the current curriculum came into effect after the Competent Learners cohort completed most or all of their schooling, the concept that compulsory and post-school education should support the capability to keep learning through life is not new. Indeed, when we began the Competent Learners study as the cohort was ending early childhood education, we included competencies related to communication, problem solving, and curiosity because we thought that one of the key purposes of early childhood education was to provide good grounds for ongoing learning.

Learning capability has become increasingly important in a world of continual change. We therefore included a set of questions about approaches to learning, seven of which we had also asked when the cohort was aged 20.

Figure 2 shows that there has been growth since age 20 in four of these aspects, possibly reflecting more time spent in work environments that matter. Three of the other aspects we asked at age 20 stayed much the same between age 20 and age 26: enjoyment of new experiences or challenges; liking to find their own ways of doing things; and turning up to appointments on time. How the 26-year-olds thought about these aspects at age 26 is included in Figure 3.

FIGURE 2 Growth in learning capacity since age 20



10 Ministry of Education. (2007). *The New Zealand curriculum*. Wellington: Learning Media, pp. 7–8.

Figure 3 includes the items from this set with which a third or more strongly agreed, and about which around 20% or fewer were neutral or disagreed. It shows that learning was generally enjoyed, something that built on what was known, and could be shared with others.

FIGURE 3 Most common approaches to learning

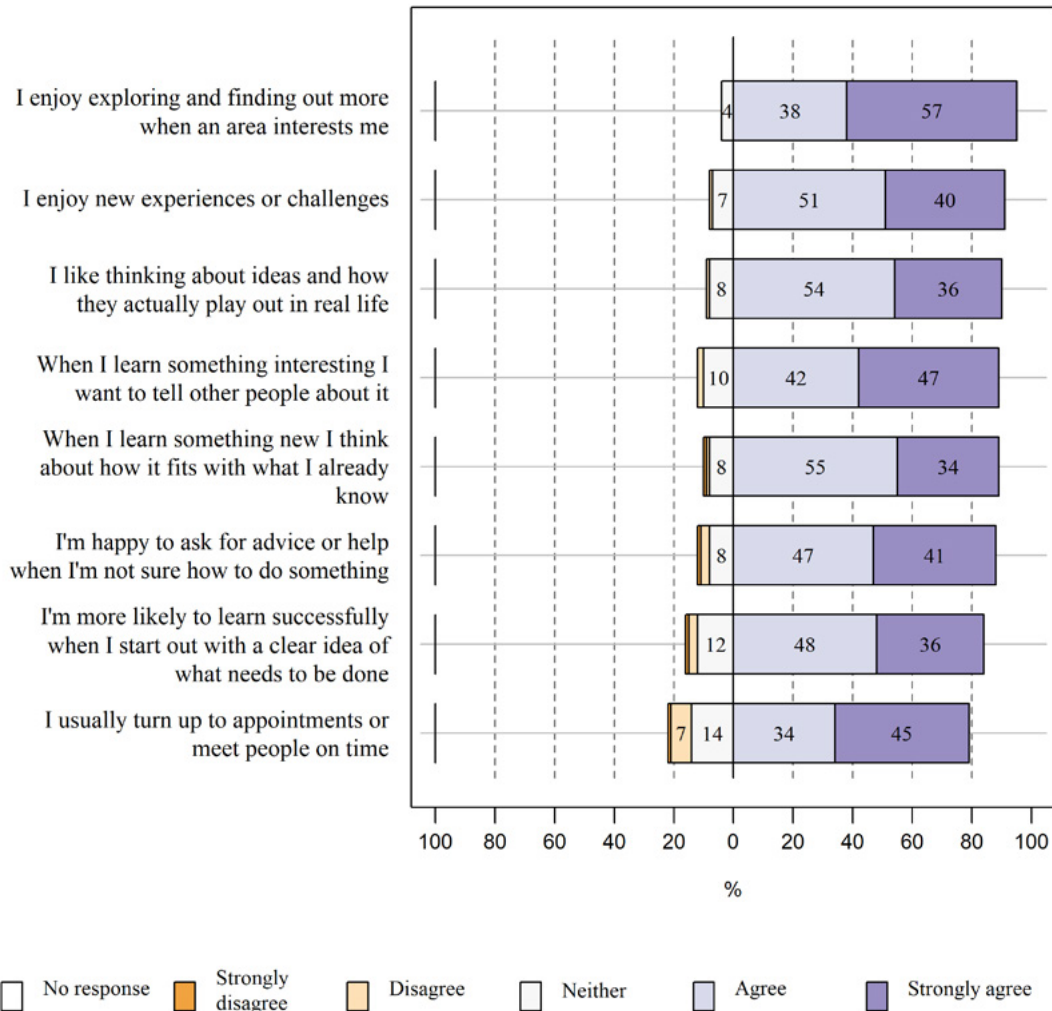
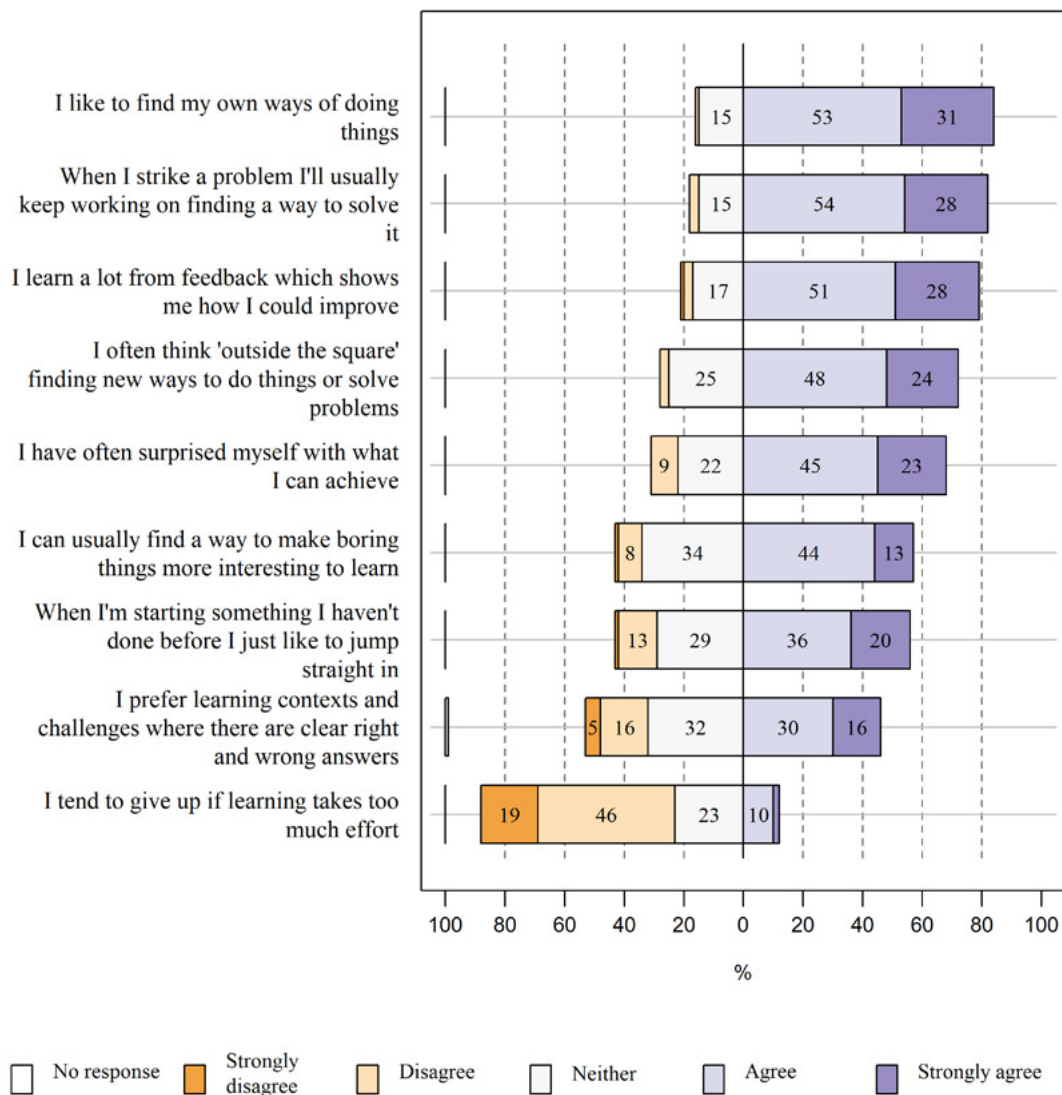


Figure 4 shows the approaches to learning with less strong agreement among the Competent Learners cohort, though there is still a majority who show agency and confidence in their learning, and who have enjoyed its gains, and the sense of achievement. Few give up if learning takes too much effort. Just under half prefer clear-cut learning, with right and wrong answers.

FIGURE 4 Approaches to learning—items with a wider range



We found some differences in approaches to learning related to occupation. Managers, professionals, and technicians and trades workers reported higher levels of enjoyment, agency, and confidence in learning, and sales and clerical and administrative workers reported somewhat lower levels.

3.

Formal qualifications gained by the end of 2013

For this section, we draw first on data for all 401 members of the Competent Learners study for whom we have qualifications data up to the end of 2013. Then we look at how different post-school qualification levels are related to NCEA achievement, early family resources, experiences of unemployment, taking gap time between school and age 20, main activity at age 20, motherhood, and gender.

We then return to the sub-group of 274 participants at age 26 who are the main focus of this report, and look at the range of their courses, what kind of institutions they studied in, and the continuing impact of student loans taken out to enable study.

Formal qualifications gained by the end of 2013

Most of the Competent Learners cohort had gained some qualification by age 25. Table 3 shows their highest qualification level.¹¹ Forty-three percent had a university qualification, 24% a tertiary certificate or diploma, 28% an NCEA level, and 5% had no qualification.

¹¹ Participants in the study at age 20 gave their consent to our using their NSN to provide the Ministry of Education with an anonymised list so that the Ministry could provide us with their New Zealand qualifications history at the end of 2013. The Ministry supplied a database of completed tertiary qualifications, another of each individual's registration history at tertiary level (from a database intended primarily to cover registration numbers in courses with different providers by year, not completed qualifications), a database of qualifications from Industry Training and NQF certificates. This meant we needed to go carefully through each individual's record and in some cases make decisions where several courses could have been the highest qualification. In some cases, we were able to infer qualifications had been achieved in 2013 from registrations recorded—for example, someone able to register for an Honours degree must have completed the Bachelor's degree first). This dataset did not include NCEA qualifications, so we used the NCEA qualifications information we had at age 20. Some of the young people had studied overseas, and this picture does not include overseas qualifications.

TABLE 3 Highest New Zealand qualification level by the end of 2013 (*n* = 401)

Qualification level	Number	%
None	21	5
NCEA ¹²	112	28
Certificate levels 1–3	41	10
Certificate or diploma levels 4–6	54	14
Bachelor's degree or graduate certificate or diploma	128	32
Honours degree/postgraduate certificate or diploma/Master's	45	11

In our age-20 Competent Learners' project report, we looked at the relationship between NCEA level achievement, and some key resources and prior experiences. Now we look at the relationship between the National Qualifications Framework (NQF) qualifications, most undertaken since school, and NCEA, early family resources of income and maternal qualification levels, people's main activity at age 20, experiences of unemployment between ages 16 and 20, gap time undertaken between ages 16 and 20, motherhood by age 20, and gender.

We include experiences of unemployment and motherhood because we found that they had a bearing at age 20 on experience of further study.

Relationship between highest level of New Zealand qualifications and NCEA

We looked at the relationship between NCEA achievement by the end of school and people's highest level of qualification by the end of 2013. NCEA qualifications at Level 3 put two-thirds of those who achieved this into a degree qualification pathway, a much higher proportion than those who achieved NCEA Level 2. A few who achieved NCEA Level 1 nonetheless went on to gain a university qualification by the end of 2013. There were also sizeable proportions with NCEA qualifications who did not go on to attain a further qualification: 45% whose highest NCEA qualification was Level 1; 49% of those whose highest NCEA qualification was Level 2; and 20% of those whose highest NCEA qualification was Level 3.

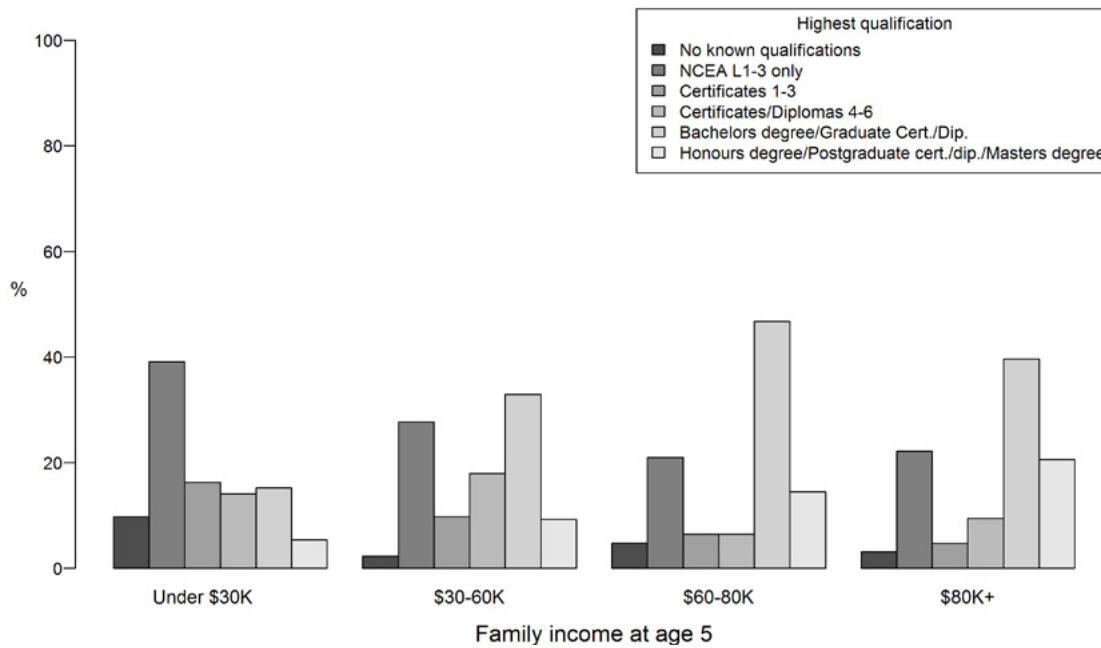
- Fifty-five percent of those whose highest NCEA qualification was **Level 1** at age 20 went on to gain a further qualification, primarily certificates levels 1–3 (29%), and certificates/diplomas levels 4–6 (20%). Six percent had achieved a university qualification.
- Fifty-one percent of those whose highest NCEA qualification was **Level 2** went on to gain a further qualification, with 12% gaining certificates levels 1–3, 24% gaining certificates/diplomas levels 4–6, and 15% a university qualification.
- Eighty percent of those whose highest NCEA qualification was **Level 3** went on to gain a further qualification, primarily a university qualification (67%, with most achieving a Bachelor's degree/graduate diplomas or certificates, 49%, and 19% achieving an Honours or higher degree). Eight percent of this group had gained certificates/diplomas levels 4–6, and 4%, certificates levels 1–3.

¹² Of the 112 whose highest qualification was NCEA, 46 had NCEA Level 3, 44 had NCEA Level 2, and 22 had NCEA Level 1.

Relationship between highest level of qualification and early family resources

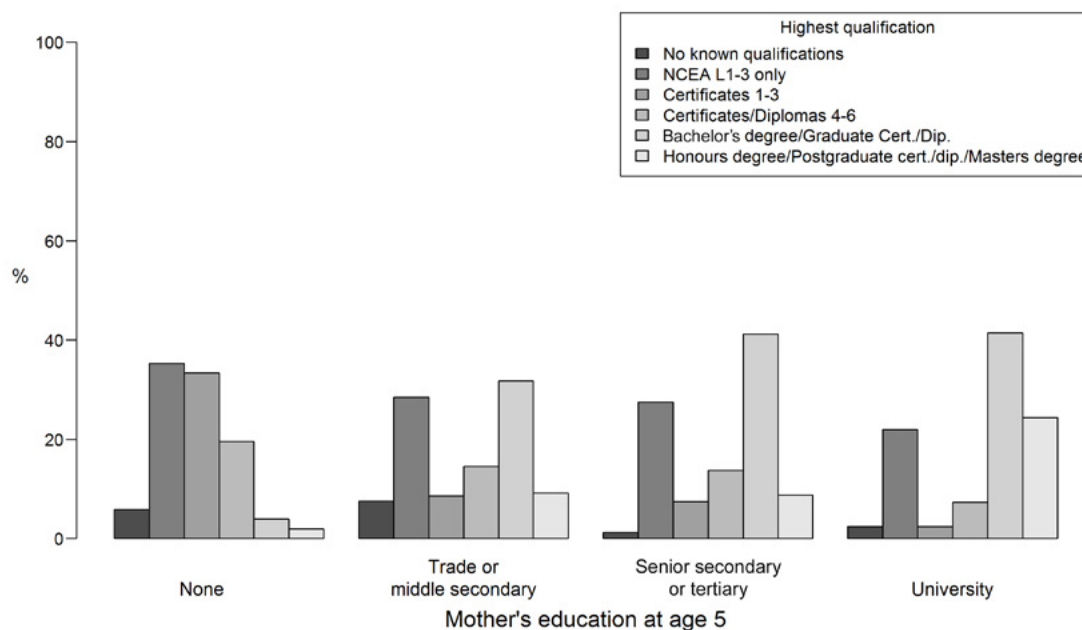
At age 20 we found associations between early family resources and qualifications gained at school. The pattern continued when looking at New Zealand qualifications gained by the end of 2013. We used the data we had from when the study cohort were aged 5 looking at family income and maternal education separately. Figure 5 shows that young people who had spent their early childhood in middle- or high-income homes were twice as likely as those who spent their early childhood in low-income homes to achieve a university qualification.

FIGURE 5 Early family income and highest New Zealand qualification by the end of 2013



Most of the young people whose mothers had no qualifications themselves when the young person was aged 5 gained some qualification, primarily NCEA or certificates levels 1–3. The higher their mother’s qualification level, the higher the proportion in this cohort who had gained a university qualification, as shown in Figure 6.

FIGURE 6 Maternal qualification and child's highest New Zealand qualification by the end of 2013



Unemployment and gap time by age 20, what people were doing at age 20, and qualification levels

Forty-four of the 401 in the Competent Learners study at age 20 had experienced unemployment by age 20. They were more likely to have no qualification by age 25 (16%, compared with 3% who had not experienced unemployment by age 20). If they had qualifications, they were more likely to be at levels 1–3 (32%, compared with 4% of others), though 9% had gained Bachelor's degrees (compared with 41% of others), and 5% Honours degrees or postgraduate certificates or diplomas (compared with 11% of others).

Sixty-six had taken some gap time between the end of their schooling and age 20. Forty-one percent of this group's highest qualification was NCEA, compared with 25% of others who had not taken gap time at this stage. While there were similar proportions who went on to gain an Honours or other post-Bachelor's qualification, fewer obtained a Bachelor's degree (20%, compared with 35% of others).

Table 4 shows differences in the highest qualification of young adults by the end of 2013 related to their main activity at age 20. Most of those whose main activity was paid work at age 20 had either NCEA or a certificate or diploma as their highest qualification by the end of 2013. Those who had been caregiving for their children or family, or receiving a government benefit at age 20 were spread between having no qualification and certificate levels 1–3. Students at tertiary institutions other than universities were spread between NCEA and Bachelor's degrees. University students at age 20 mainly had degrees by the end of 2013. Note, however, that 16% of those who had been university students and 19% of those who had been tertiary students at age 20 had not gone beyond NCEA by 2013 (though some might have gained overseas qualifications).

TABLE 4 **Highest New Zealand qualification level by the end of 2013 in relation to main activity at age 20 (n = 401)**

Qualification level	At home/ on benefit (n = 36) %	Working (n = 114) %	Tertiary student (n = 58) %	University student (n = 193) %
None	25	8	5	0
NCEA	39	49	19	16
Certificate levels 1-3	25	22	12	0
Certificate or diploma levels 4-6	11	19	38	3
Bachelor's degree or graduate certificate or diploma	0	2	26	58
Honours degree / postgraduate certificate or diploma/Masters	0	0	0	23

Motherhood, gender, and qualification levels

Twenty of the Competent Learners cohort had become mothers by age 20. Their additional responsibilities are likely to have lessened their opportunities to gain qualifications. A quarter had no qualifications by the end of 2013, none had university-level qualifications, 30% had levels 1-3 qualifications, and 35% a level 4 qualification.

Just over half those with children at age 26 either had NCEA as their highest qualification, or none. Another 15% had a level 1-3 certificate as their highest qualification.

Overall, there were no gender differences evident in relation to qualifications obtained by the end of 2013.

Qualifications and study for the sub-group of 274

Returning to the sub-group of the 274 young people we focus on in this report on pathways, learning, and work, we see a higher qualification profile than for the whole Competent Learners cohort that they are part of. Just over half of this group of young adults had gained a university qualification by the end of 2013. Table 5 shows their highest qualification level.¹³

¹³ This group of 274 of the Competent Learners cohort has higher qualification levels than the 127 for whom we have qualification levels but who did not also complete both their interview and self-report at age 26. This shows up at either end of the qualification spectrum: in the group of 127, 26% had a university qualification, and 15% had no qualification.

TABLE 5 Highest New Zealand qualification level by the end of 2013 for the Pathways group (*n* = 274)

Qualification level	Number	%
None	2	1
NCEA	71	26
Certificate levels 1-3	26	10
Certificate/diploma levels 4-6	34	12
Bachelor's degree or graduate certificate/diploma	100	37
Honours degree / postgraduate certificate or diploma/Master's	39	14

Fields and places of study

Completed qualifications covered a broad range. The fields of society and culture (17%), management and commerce (16%), the natural and physical sciences (12%), and creative arts (10%) headed the list of qualifications gained. Other fields included engineering and related technologies (6%), food, hospitality, and personal services (6%), architecture and building (4%), and health (4%). Two percent to 3% each of the qualifications were in mixed field programmes, information technology, education, and agriculture, environmental, and related studies.

Sixty percent of the qualifications gained were through learning programmes provided by universities. The next most common providers of qualifications—but some way behind universities—were ITPs (23%) and then PTEs (15%).

Over a third (107 of the 274) had more than one qualification, usually a Bachelor's degree followed by a postgraduate qualification, or multiple certificates and/or diplomas across one or more fields of study.

Although we have not analysed in which order the qualifications were gained, some combinations seem obviously aimed at developing more skill and knowledge in a particular area, sometimes as a professional requirement (e.g., taking a professional legal studies programme at a PTE to prepare for the bar exam following a law degree) or enhancing theoretical and practical aspects of a field (e.g., gaining a National Certificate in Multimedia Journalism and a Bachelor of Communications or gaining a Bachelor of Design and Certificates in Pattern Design and Garment Making).

4.

Do qualifications and occupations match?

Findings from the OECD's Survey of Adult Skills suggest that New Zealand has higher levels of mismatch—workers with higher or lower skills proficiency than required by their job—than other OECD countries (Ministry of Education, & Ministry of Business, Innovation and Employment, 2016). Mismatch has implications at the policy level, at the institutional level, employer level and, of course, individual choices of learning and expectations of what that learning could lead to.

In this section we explore the match of qualifications with the occupations of the sub-group of 274, at age 26, in the early years of their working lives. We start with a description of the occupations of those in paid work, followed by a broad-brush look at occupational groups related to highest qualification levels, and then a finer-grained look at how their occupational group related to the specific area of their qualification.

Occupations and paid work arrangements

Eighty-four percent of the Competent Learners group were in paid work, and 88% of those in paid work had just one job. Their paid work was usually full-time (76%), permanent (79%), and as an employee (85%). Fewer women had permanent jobs (73%, compared with 86% of men), and more women had casual work (15%, compared with 2% of the men). Thirteen percent had part-time work, and 10%, casual work.¹⁴ Seven percent were employed as contract labour, 5% as independent contractors. Two percent ($n = 5$) owned their own business and four people employed others.

Most participants worked in the private sector (72%). Twenty-three percent worked in the public sector (including education and health jobs) and 4% worked for not-for-profit or local government organisations. The median number of people in their workplace or worksite was 27.

We asked participants for their job titles and a very brief explanation of it or description of their work. Most job titles were established ones with which most of us would be familiar—for example, bank officer, nurse, commercial diver, junior doctor, HR adviser, and carpenter. However, there were also some job titles which, while becoming more familiar, have only emerged in recent years—for example, front-of-house barista, anti-money laundering analyst, museum host, dog walker, photography stylist, and 3D story artist.

¹⁴ Part-time and casual work was mostly among those earning less than \$30,000 a year, though a third of the low earners worked full-time. Forty percent of this group did not have permanent work.

We coded the job titles against the Australia and New Zealand Statistics Occupational Categories (ANZSOC). Among this group, with higher qualification levels than for their age group nationally, the most common occupational category was *Professional* (37%). The next most common occupational category was *Clerical/Administrative* (22%), followed by the *Technical and Trades* (12%) and *Community and Personal Services* (12%), *Sales* (9%), *Managers* (6%), and *Labourers* (3%) categories. Young people working in community and personal services, sales, or as labourers had lower rates of full-time work. More women than men worked in clerical/administrative work, and more men than women in technical and trades occupations.

Match of qualification levels and occupational groups

Most of those in professional occupations had university qualifications or were near completing them—but not all. The other occupational groups included a wide range of qualification levels. The substance of the qualification is more likely to show a match, as we show next.

Match of qualifications and occupations

Matching of qualifications and occupations is not an exact science. The OECD Survey of Adult Skills determined “skills proficiency” through the proxies of qualification and field of study. So mismatches were defined as when either the qualifications are higher or lower than required by the job or when people work in a sector or job unrelated to their field of study.

We explored matching of qualifications and occupations by looking at, first, the young people’s view of whether their highest qualification was necessary for their current job, and, second, analysing the match between their qualification area and their occupational category.

The Competent Learners at age 26 were mostly confident that their job was using the skills they had (90%), but less clear that their job was related to the areas they had studied or worked in (63%). Forty-two percent thought that “I couldn’t have got this job without the highest qualification I have”. The difference between their sense that their qualification level was essential to gaining their job, and that their work was related to what they had studied or previously worked in may say something about their sense of the weight their employer had given to their highest qualification in relation to all their qualifications (given that, overall, more than a third had more than one qualification), or other information about their work history (including references), and how they had presented themselves in an interview.

In our analysis of the relationship between qualifications and occupations, we used people’s job titles and descriptions of what they did. As we went through each person’s qualifications and job titles/descriptions, we considered it a “match” if the job was related to the qualification’s broad field of practice. Some of these were obvious—for example, a Bachelor of Fine Arts with the job of illustrator or a Level 2 Certificate in Hairdressing with the job of hairdresser. Others were less obvious—for example, a Bachelor of Arts with the job of museum host but the job description provided showed the relevance. We also considered it a match where someone was in paid work but had no formal qualifications, on the basis that it was likely that the employer had considered the young person’s previous job history, attitude, or demonstrated skills. In four cases, we were simply unsure.

This analysis showed an overall match of 84% for the 220 young people for whom we had relevant data. Table 6 shows that the best matches between qualification area and work content appear to be for professionals, technicians and trades, and managers, where qualifications are often specified.

TABLE 6 Match of qualification area with occupation

Occupational category	Match	No match	Unsure	Total No.	Match %
Professionals	81	2	1	84	96
Technicians and trades workers	22	1		23	96
Managers	12	1		13	92
Clerical and administrative workers	39	9	2	50	78
Community and personal service workers	17	8		25	68
Labourers	4	3		7	57
Sales workers	10	7	1	18	56
Grand total	185	31	4	220	

We did not (and could not) consider match in terms of whether the *level* of qualification was actually needed for particular jobs. This is really a question of labour market workings—for example, supply and demand, competition, business models and decisions, networking, and sheer luck. However, Table 7 does show a greater likelihood of a match for higher certificates, diplomas, and degrees.

TABLE 7 Match of qualification level and occupation

Qualification	Match	No match	Unsure	Total	Match %
Bachelor's degrees	64	15		79	81
Certificates levels 1-3	10	4	2	14	71
Certificates level 4	8	8		16	50
Certificates/diplomas levels 5-7	12	1		13	92
Graduate certificates / diplomas	5			5	100
Honours degrees / postgraduate certs/dips	21	3	2	24	87
Master's degrees	1			1	100
Grand total	121	31	4	152	

Interestingly, it was the most typically “vocational” (field or industry-specific) qualifications at levels 4 and below that had the least likelihood of a match. These certificates were in a wide range of areas including hospitality, travel and tourism, music, automotive engineering, nannying, animal care, and fashion. Since some of these certificates are gained through apprenticeships and work-based learning, this lower match raises some questions that this study cannot answer. For example, had some of the young people moved from work where their qualifications had matched, to new fields? What influenced their choices: availability of work, workplace relations, financial reward, or personal and professional satisfaction?

Drilling down into mismatches for qualifications above level 4, we found none with the Bachelor of Arts degree, which is designed to be applicable to a very wide range of jobs. Commerce degrees also have wide application and of the 14 Commerce degrees gained, just one seemed mismatched to the job. Science degrees told a different story with 10 mismatches, including for four with Honours and/or additional postgraduate diplomas in science.

Caution needed about claims of mismatches between qualifications and paid work

Our analysis makes us cautious about more general claims of mismatching between qualifications and paid work. It may be hard to be decisive about it with just information on qualifications and occupational levels. And even our analysis is limited to a specific point in time, rather than the work people do through their lives.

What is interesting is that most of this group thought that their current jobs used skills they had, skills that develop through both formal learning, and learning at work. As we saw in the previous section, learning through work, leisure activities, and participation in voluntary or communal purposes also plays a part in the skills people develop and are part of the opportunities a society can provide to develop its members' capabilities.

How people decide or find work also plays a role in what they do, beyond qualifications. In the next section, we focus on work experiences, including how employed young adults found their current job.

5.

Paths to work

In this section, we explore how young adults in work at 26 saw the path to their current job, and how they had found their current job. We also describe the situation of those currently not in work, most of whom had been in work in the past.

The lead-in to current paid work

Most commonly, the young adults reported that learning programmes taken since school had led to their current work (44%).¹⁵ Some way behind that, the next most common influences cited were an interest or hobby (29%), friends or family (29%), and previous experience of the work (27%). After that came the availability of work (20%), and opportunities (15%).

Learning programmes since school were reported less by those who were working in sales or clerical and administrative work. Personal interest was cited most by labourers, professionals, and managers.

Table 8 shows that very few reported planning or use of careers advisory services or resources (6%, made up of approximately 1% advice from school; 1% careers resources; 1% Work and Income New Zealand (WINZ) help; 1% private careers advice or life coach, and 1% tertiary careers centre advice). School subjects were rarely seen as a direct influence on the lead-in to current paid work, though they are likely to have been related to tertiary-level courses.

¹⁵ We asked those with more than one job to answer in terms of the job that was most important to them. We also asked them why they chose this job as the most important to them: their main reasons were that it was the work of most long-term value to them, which held the most interest for them, or had the best pay.

TABLE 8 Influences leading to 26-year-olds' current work

Influence	n = 230 %
The courses I took after leaving school	44
Interest or hobby of mine	29
My friends or my family	29
Previous experience with this work or employer (including volunteer work)	27
Availability of work in this field	20
Opportunities sought (career, challenge, lifestyle, or travel)	15
Needed to work/money was a consideration	9
Careers advisory services or resources	6
Chance	5
Subjects I did at school	4
I planned on having work like this when I left school	2

The lack of career planning is not surprising. First, this group has come through a time when school-based career education has too frequently been inaccessible, marginalised, or not fit-for-purpose for 21st century careers (Vaughan, 2011). Secondly, research has shown that formal planning is not as influential in the approach to career as developing self-awareness and positioning for opportunity (Bezanson et al., 2008; Lo Presti, 2009; Savickas et al., 2009; Vaughan & Spiller, 2012).

Table 9 shows responses to a question about how people found their current job. It shows that more than half of the group found their job by approaching the employer, responding to an advertisement, making a direct approach, or by having an interview set up for them. We are not able to clarify what occurred after a "friend or family told me about the job" but it was possibly a prompt about, or acting similarly to, seeing a job advertisement.

In total, 27% reported using pre-existing contacts or experience either through prior work experience or a personal connection.

TABLE 9 How 26-year-olds found their current job

Source	<i>n</i> = 230 %
<i>Proposition or application</i>	
Friend or family told me about the job	32
I responded to an advertisement	30
Interview set up by recruitment firm / skills broker / careers adviser	12
I was approached by someone from the workplace	10
I approached the workplace	9
I heard about the job by chance	4
<i>Pre-existing contacts or experience</i>	
I knew the employer through my interests/hobby, previous work, or voluntary work	10
Progression within same organisation	8
Friend or family offered me the job	5
Networks (not family or friends)	4

While 12% reported that a recruitment firm, skills broker, or careers adviser set up a job interview, only 3% earlier reported careers advice being an influence that led them to their current job. It may be that participants see a distinction between careers advice and getting a job. This was also reflected in their responses at age 16 to questions about what they anticipated they would find easiest and hardest about leaving school. Students rated “finding a job” as easier than “establishing a career”. They also rated “working out what I want to do” as harder than either of those (Vaughan, 2008a).

Nearly everyone had an unproblematic time getting into their current job, reporting the path to it as straightforward (42%) or very straightforward (40%). There were “a few twists and turns” for 16% and a “messy/difficult” path for 1%.

Getting into their current job was less straightforward for those who were technicians or tradespeople, managers, or labourers. Those in sales, community, or service roles were most likely to say it had been extremely straightforward.

Two-thirds of those who had not experienced a straightforward path to their current job had experienced times when they could not find work since they left school, compared with 39% of those whose path was straightforward. They were also less likely to have had only one job in the past 3 years (15%, compared with 27% of those whose path was straightforward). There were no differences between these young people and those whose path was straightforward when it came to what they saw had led them into their current field of work or how they had found their current job.

The members of this group were also no more likely than others to express some regret about their formal learning since they left school—so the choices or experiences in that learning were seen as providing more possibility than obstacles. However, these young people were more likely to say they had done some informal learning over the past year (74%, compared with 62% overall).

Participants currently not in paid work

Sixteen percent of the young adults ($n = 44$) were not in paid work at the time of their interview around the age of 26 years. Some of the same people were not in paid work at age 20 too but some were formerly in paid work or formal learning (or both).

Based on our snapshot in time, there were more people *not* in paid work at age 26 than at age 20. Governments around the world are concerned with those not in employment, education, or training (NEET). However, some NEET time is fairly common, particularly for people around this age. Earle (2016) found that 34% of 22-year-olds (the age he focused on) have some NEET spells during a year. Just under half of all the 274 young adults (46%) had some experience of actively looking for work, and not being able to find it, since they left school. Three months was the median for the longest time of looking for work and not being able to find it.¹⁶ Almost a quarter of the 274 had looked for 6 months or more before being able to find work at some stage since they left school.

Earle (2016) notes that not all young people who are NEET are on a benefit and not all people on a benefit are NEET, and that some are likely to be parents and caregivers (and therefore not seeking paid work).

Our group were similarly mixed. Just 15 of the 44 were actively seeking work, with the rest mainly occupied with parenting or full-time study or training. Several were coping with poor health, and some were travelling. Most of those not actively looking for work expected they would look for work again in the next 3 years.

Most of the 44 ($n = 33$) had been in paid work at some point over the past 5 years, with the most common period of time out of paid work between 3–12 months at the time of their interview. Most of these 44 people not in paid work had formal qualifications (35). Most commonly these were at degree level or higher ($n = 25$), with nearly half ($n = 12$) of these in the field of science.

The active work-seekers sought work in areas in which they were interested and had experience or qualifications. Half had relevant qualifications for the kind of work they sought; some said the work did not need qualifications. Most of the active work-seekers were not receiving a government benefit, either living off savings, or saying they were not eligible.

¹⁶ We did not ask how many times people had looked for work and not been able to find it, or to give us a total number of months without work—we thought this could be difficult for people to work out in the course of an interview.

6.

Experiences with work

Work is foremost

Almost all the young people said it was very important or important to them to enjoy their work, do well at it, and have fulfilling work.¹⁷ Eighty percent of the young people had definite goals for the next 3 years of their life. Work dominated these goals: they were work-related for 71%, compared with 43% around travel, 33% around finances, 29% around study, and 24% around family. Work goals usually also had plans to support them: 70%, much higher than the existence of plans for other aspects of life. Planning was in place for 46% of those with a goal to travel, 33% of those with financial goals, 29% of those with study goals, and 24% of those with family goals.

What is work like?

We asked those in paid work about 17 aspects of their work experiences and the role of work in their life. They rated each on a 5-point scale of agreement. By running a statistical factor analysis, we could see where people gave similar ratings to the same items. Table 10 outlines the three factors identified in this analysis. They account for 14 of the 17 aspects we asked about. The Alpha rating describes the degree of consistency between the items: an Alpha rating of 1 means that all items were rated the same by each individual.

¹⁷ The full picture of what was important to the whole Competent Learners @ 26 cohort is given in the companion report, *Shaping Adulthood* available at [XXXXX](#).

TABLE 10 Factors and items related to age-26 work experiences

Factor names	High agreement with items
Purposeful and satisfied alignment: planned pathways and job satisfaction Alpha of 0.85	My job is related to the areas I've studied or trained in My job provides me with worthwhile experiences for my future I see my present job as part of a longer term career My job uses the skills I have I couldn't have got this job without the highest qualification I have My job is interesting This is as good a job as I hoped for by this age
Worthwhile and secure Alpha of 0.70	My job is worthwhile My job is secure There are promotion prospects for me in this job My job makes a contribution to society
Good relations: good workplace relationships Alpha of 0.69	I get on well with the person I report to / my immediate boss I get on well with my colleagues/workmates There's someone here who looks out for me and thinks about my future

Figure 7 shows that most of the young people had interesting work that used their skills—though not necessarily related to the areas they had studied or trained in. More people thought they had not needed their highest qualification to get the job than thought they had needed it. Most work felt as if it was connected to future opportunities—though not necessarily as part of a longer term career.

FIGURE 7 Purposeful and satisfied alignment



Those whose highest qualification was NCEA were less likely than others to think that their job used the skills they had, or was related to the areas they studied or trained in.

Those earning less than \$20,000 a year were least likely to see their job as interesting. Together with those earning between \$20,000 and \$30,000 a year they were also less likely to see their job as using their skills, providing them with worthwhile experience for their future, or to be as good a job as they hoped for by this age.

Most were positive that their job was worthwhile, secure, and made a contribution to society, as shown in Figure 8. The lowest paid were the least likely to agree with these statements.

FIGURE 8 **Worthwhile and secure**

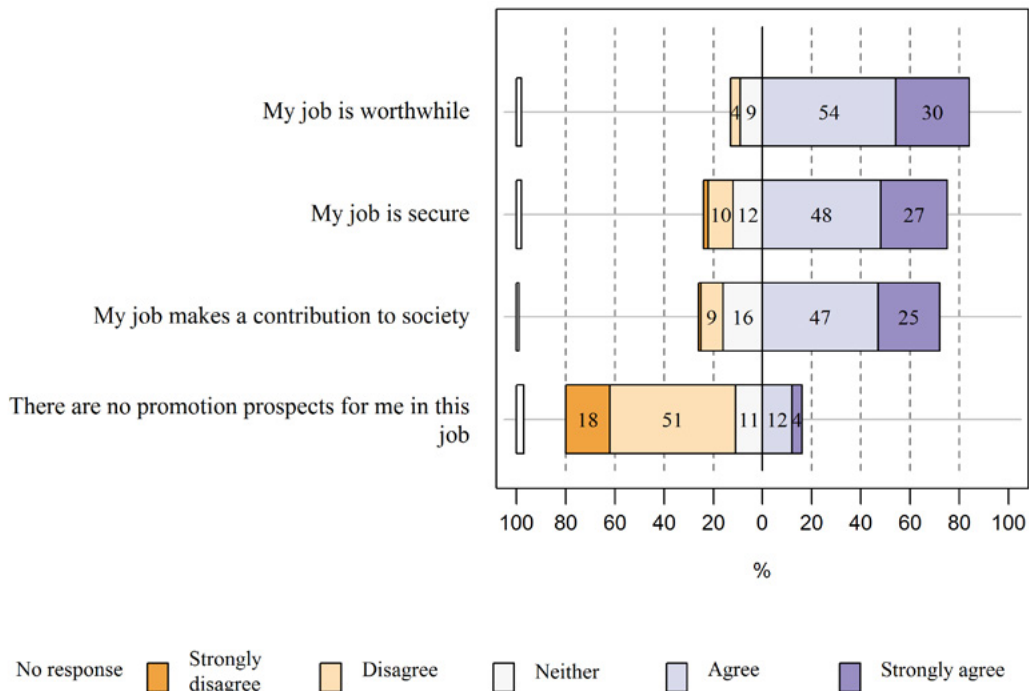
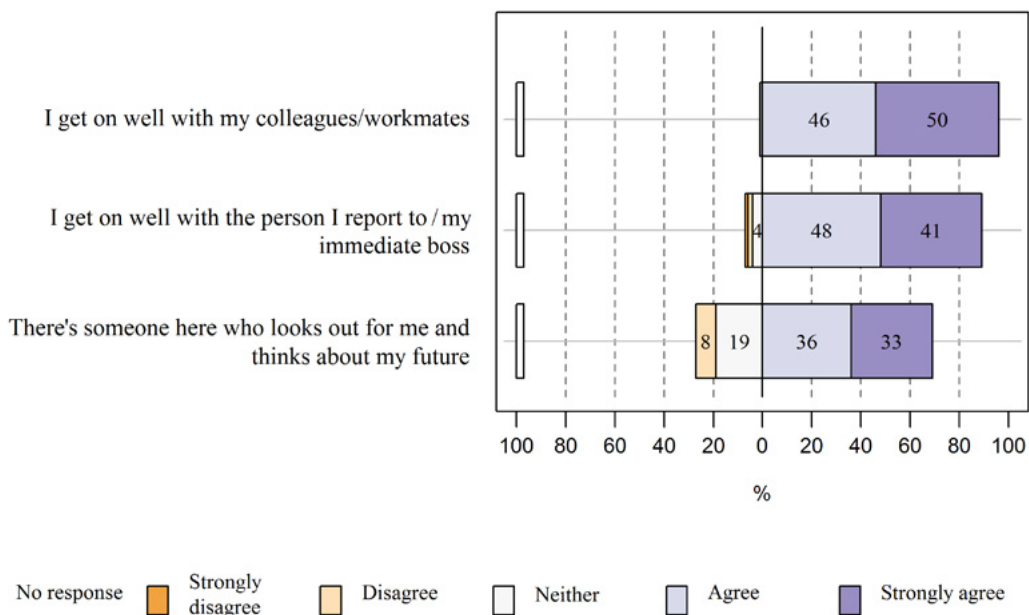


Figure 9 shows that relations with workmates and their immediate manager were generally good, and many had someone in their workplace who looked out for them and thought about where they could head in their work.

FIGURE 9 **Good workplace relations**



Three aspects did not fit into any of the three factors above because how people answered these was not highly related to their responses to the items within each of those factors.

Two of these aspects of work experience show how work and qualifications have become intertwined, rather than qualifications acting as a single stepping stone to work.

- *I need more qualifications or training before I can get the job I really want*
Just under half thought they needed more qualifications or training before they could get the job they really wanted (12% strongly agreed, and 32% agreed).
- *I see my present job as a way to supplement my income while I study/train for my future career*
Thirty-one percent saw their present job as a way to supplement their income while they studied or trained for their future career (10% strongly agreed, and 21% agreed).
- *I am satisfied with the level of pay for the job that I do*
Fourteen percent strongly agreed and 49% agreed that they were satisfied with the level of pay for their job. Twenty percent were neutral about this. Eighteen percent disagreed, and 12% strongly disagreed—a total of 30% who thought their job was underpaid. Those who thought they were underpaid included people from all income levels, but at much lower proportions for those paid over \$60,000 a year.

Satisfaction with pay was unrelated to the views of the work described in the three factors. This is consistent with research about the relationship of satisfaction with pay and satisfaction with work (Chamorro-Premuzic, 2013; Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010).

Perspectives on work differ with the kind of work

Do perspectives on work differ according to the kind of work people do? We analysed the relationship between the types of work the young people were doing, and their scores on the three factors, and the three items above that did not fit one of the three factors.

We found some relationships between the kind of work people do, and their views of that work, including whether people saw their current job as a way to supplement their income while they studied for their future career; but not in relation to satisfaction with pay, or whether they would need more qualifications to get the job they really wanted.

People with community and personal service jobs and those in sales jobs stood out as seeing their current job in temporary terms before a future career (59% of the former and 50% of the latter strongly agreed or agreed that their current job was mainly a support for their study and a different career).

Figure 10 below shows the highest median score on the Purposeful Alignment factor for those working as professionals, followed by technicians and trades workers. This may reflect plannedness in their pathways and the greater likelihood of their tertiary education leading into work that uses the skills and qualifications they have gained. The managers' category median comes next.

Sales workers had the lowest rates of agreement with the items in the Purposeful Alignment factor. These jobs tend to offer less security. Notably, more people in this group reported their jobs as temporary and a means to an end, for money while engaged in part-time tertiary education or while making life changes.

In between come community and personal service, and clerical and administration workers. Both groups had the widest range of ratings. Clerical and administration workers in our group include customer service representatives, advisers, and co-ordinators. The wide spread may reflect differences in industry area and/or work environment, making for an experience of meeting customer needs that is more or less satisfying. The community and personal service group includes diverse occupations that may account for its wide range: hospitality workers such as chefs, baristas, and waitstaff; teacher aides; nannies; and less common occupations such as dog walker, museum host, and professional bridge player.

FIGURE 10 Occupational category and agreement levels for the Purposeful Alignment factor¹⁸

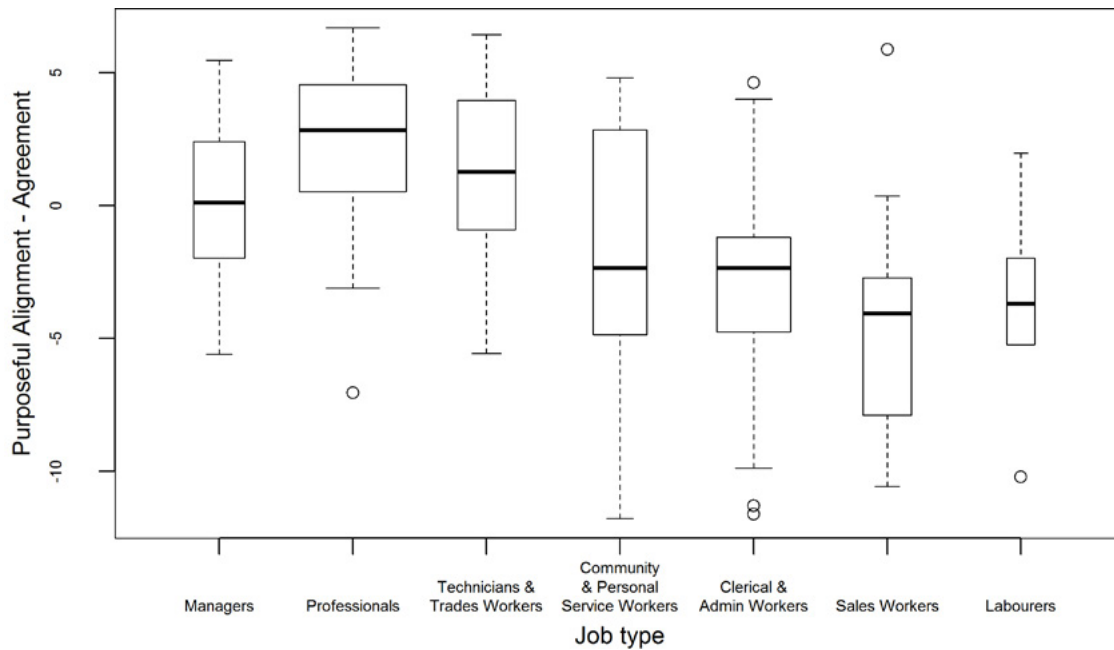


Figure 11 shows that the medians across the occupational groups are more similar for the Worthwhile and Secure factor, though those in the professional group had a higher median than others.

¹⁸ In these box-and-whisker plots, the overall median score on each factor is given as 0. For each occupational group, the median (mid-point of data) shows as a bold line dividing the box into two parts. Half of the ratings are greater than or equal to this value (i.e., the top half of the box up to the top of the “whisker”) and half are less (i.e., the bottom half of the box down to bottom of the other “whisker”). Each whisker represents ratings outside the middle 50%, which are usually over a greater range than what is in the box. Dots represent outliers. The width of the box is proportional to the number of individuals represented (the largest group is the professionals, and the smallest is the labourers).

FIGURE 11 Occupational category and levels of agreement with the Worthwhile and Secure factor

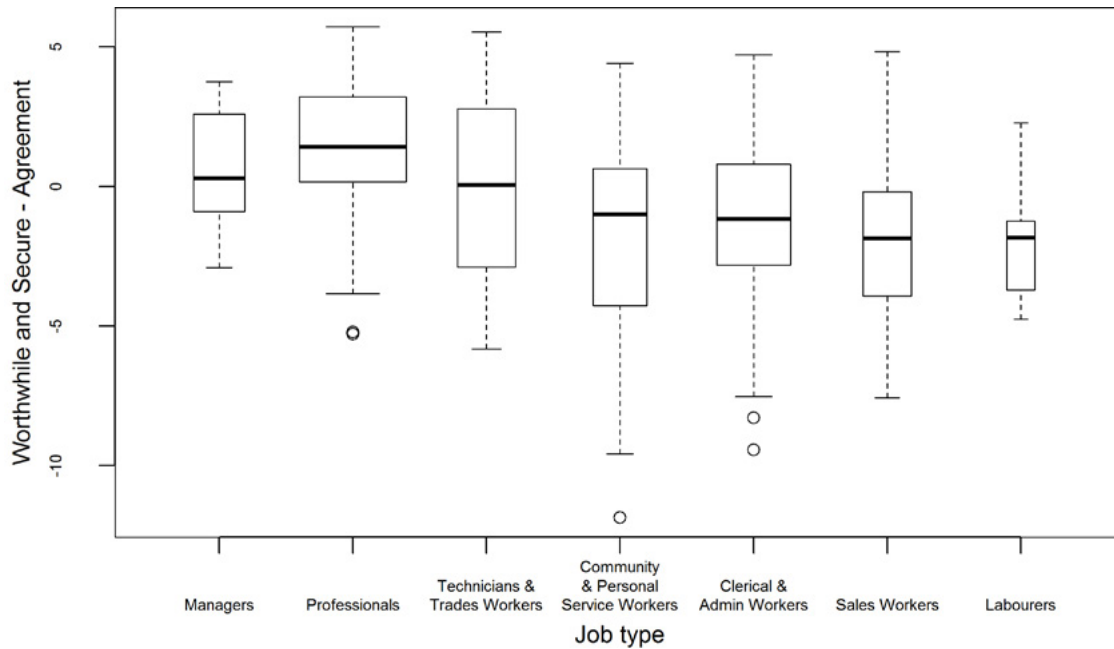
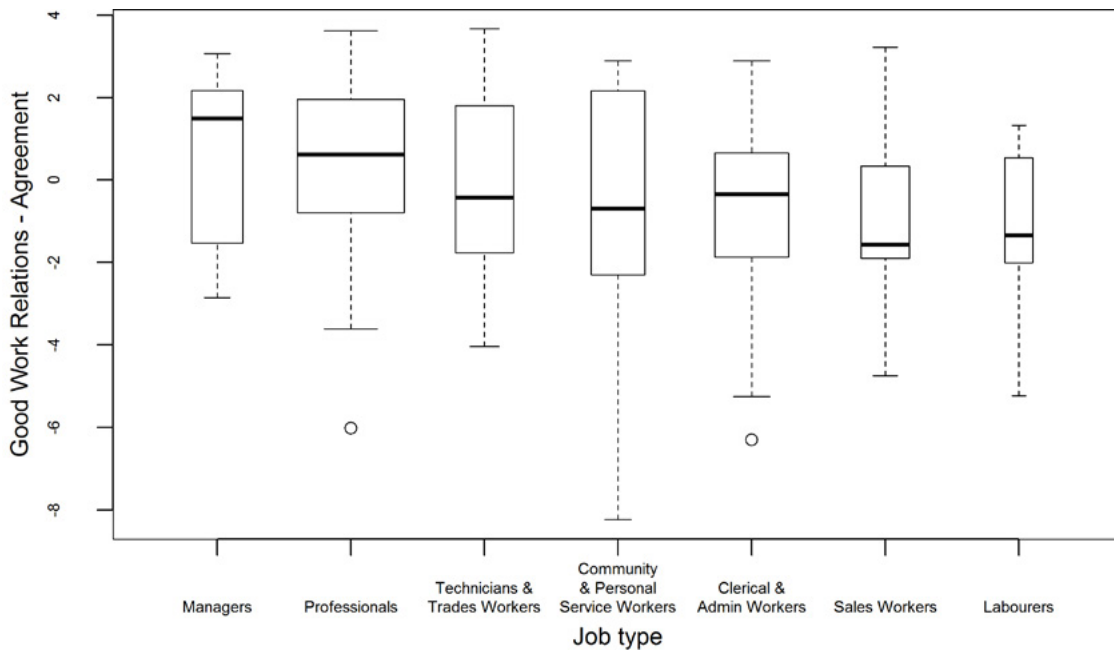


Figure 12 shows that the managers category had the highest median level for the Good Work Relations factor. This may reflect their comparatively more powerful position in relation to others in the workplace. People may perhaps defer more to them, giving them a rosier picture of their relationships. The higher median could also be because managers are well positioned to set a good tone for relationships and workplace culture as decision makers in individual worksites or across multiple worksites. Several people in this group also owned businesses or were self-employed.

Professionals came next, followed by those in the technicians and trades, community and personal service, and clerical and administration work. Sales workers and labourers had the lowest median ratings on the Good Work Relations factor.

FIGURE 12 Occupational category and levels on the Good Work Relations factor



7.

Learning opportunities at work

Expectations that work would include ongoing learning were high at age 20 (Wylie & Hodgen, 2011). In this section we describe the kinds of learning that the 26-year-olds experienced at work, the desires of a third or more for greater opportunities to learn on the job, and experiences that had been particularly significant for their learning.

Asking about different kinds of learning activities at work allowed us to acknowledge the growing importance of informal and non-formal learning, often occurring through social and participatory practices in workplaces (Billett, 2004; Cole, 2016; Janssens, Smet, Onghena, & Kyndt, 2017; Manuti, Pastore, Scardigno, Giancaspro, & Morciano, 2015). This learning in workplaces is crucial for developing the kind of “soft skills” and dispositions now needed for capability in many fields (Vaughan, 2017). Asking about learning activities, rather than categories of learning, also allowed us to acknowledge that the boundaries between formal, informal, and non-formal learning nearly always overlap in real life. For example, learners invariably draw on informal learning as part of any formal or non-formal learning undertaken, whether in an educational institution or a workplace (Colley, Hodkinson, & Malcolm, 2002; Hodkinson, Biesta, & James, 2008).

We asked about aspects of learning that could be structured into a job. Table 11 shows that most participants reported regularly giving and receiving feedback. More than two-thirds occasionally attended workshops or seminars. More than half had regular one-to-one mentoring though fewer provided such mentoring to others. Half were encouraged to keep a work record. Around a third had perhaps the most structured opportunities of all—regularly scheduled coursework, classes, or skills practice sessions.

TABLE 11 Structured learning in the job

Form of structured learning	n = 230 %
Receive regular feedback from work colleagues, employer, or clients	78
Give regular feedback to work colleagues, employer, or clients	70
Occasional one-off workshop, conference, seminar	69
Scheduled one-to-one mentoring for advice and support	55
Encouragement to keep a regular record about your work (e.g., portfolio)	50
Give scheduled one-to-one mentoring to workmate	39
Regularly scheduled coursework, classes, or skills practice sessions encouraged by your employer or an education institution	34

Professionals and managers had more structured learning on the job than those in other occupations.

Unstructured learning was even more common. Table 12 shows that discussion was reported by nearly everyone and observing others was also very common. Just under three-quarters engaged in professional or technical reading as required. Just over half also gained from their contacts in other companies.

TABLE 12 On-the-spot unstructured learning in the job

Types of on-the-spot learning	n = 230 %
Taking on occasional feedback from colleagues, employer, or clients	96
Talking with workmates about questions you have or something you need help with	96
Offering occasional feedback to colleagues, employer, or clients	90
Observations of other colleagues or workmates as they work	84
Professional or technical reading when required	71
Talking with people in other companies that do similar work	56

Professional reading was most common among managers, professionals, and those in the trades/technical occupations. Contact with people in other companies was lowest for salespeople, and those with clerical and administrative roles, or caregiving and personal care roles.

The workplace as a learning environment

Research on workplace learning has shown that successful learning in the workplace does not happen by accident and is not simply the work of individual learners/workers. Employers and workplaces provide the particular conditions that support the availability and uptake of learning opportunities and the means to consolidate that learning into practice. We used a workplace learning model of pedagogies and structures developed from research (Vaughan, 2008b; Vaughan, O'Neil, & Cameron, 2011) to ask our participants about their experiences of a range of elements involved in good workplace learning.

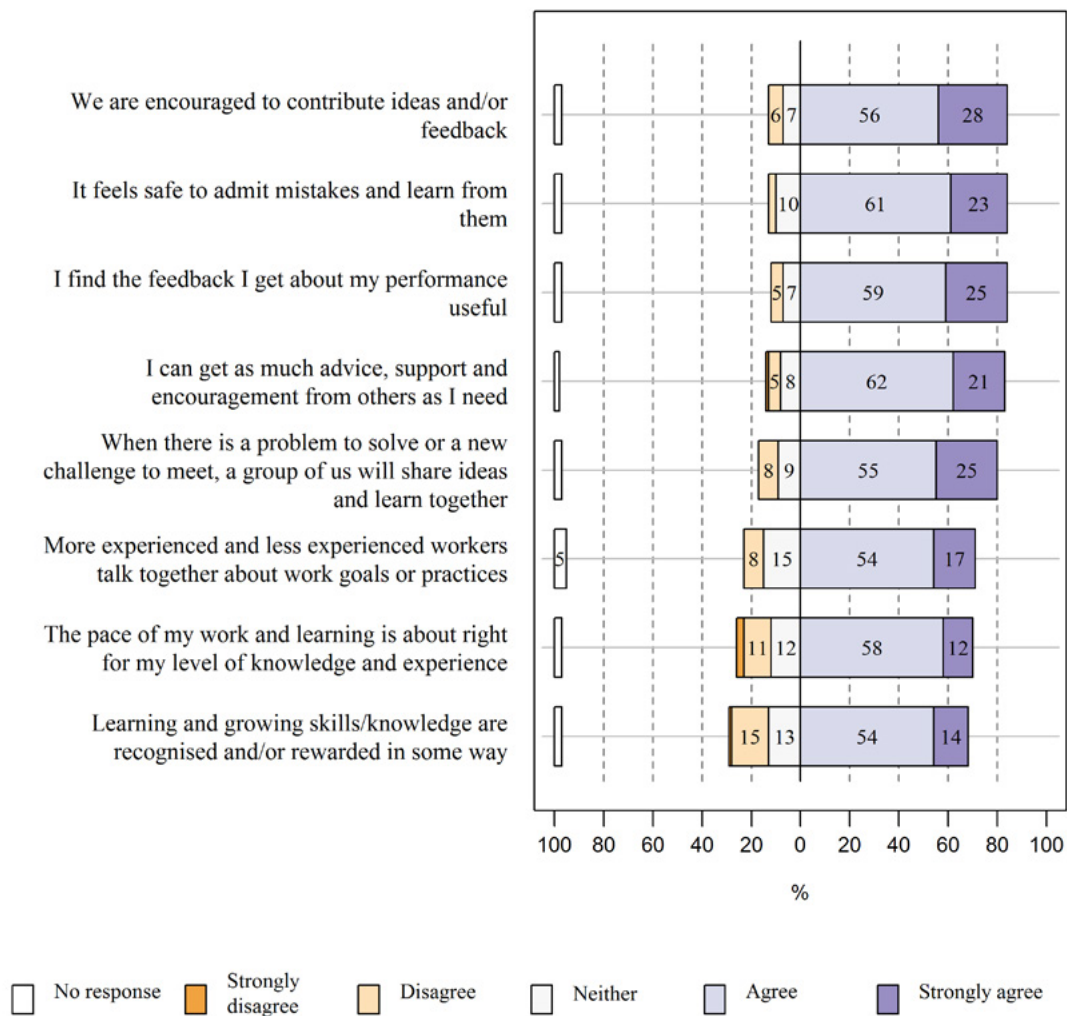
Once again, we undertook a statistical factor analysis so that we could see how experiences were related to different kinds of work. Table 13 shows the one factor that emerged from this analysis, relating to workplace practices.

TABLE 13 Learning-enabled workplace factor

High agreement with items	
<p>Learning-enabled workplace: workplace practices that foster learning</p> <p><i>Cronbach's alpha: 0.84</i></p>	<ul style="list-style-type: none"> • We are encouraged to contribute to ideas and/or feedback • When there is a problem to solve or new challenge to meet, a group of us will share ideas and learn together • More experienced and less experienced workers talk together about work goals or practices • I can get as much advice, support, and encouragement from others as I need • I find the feedback I get about my performance useful • It feels safe to admit mistakes and learn from them • Learning and growing skills/knowledge are recognised and/or rewarded in some way • The pace of my work and learning is about right for my level of knowledge and experience

Figure 13 shows that most of the young people felt they had supportive conditions for workplace learning—about a quarter strongly agreeing they had most of these conditions.

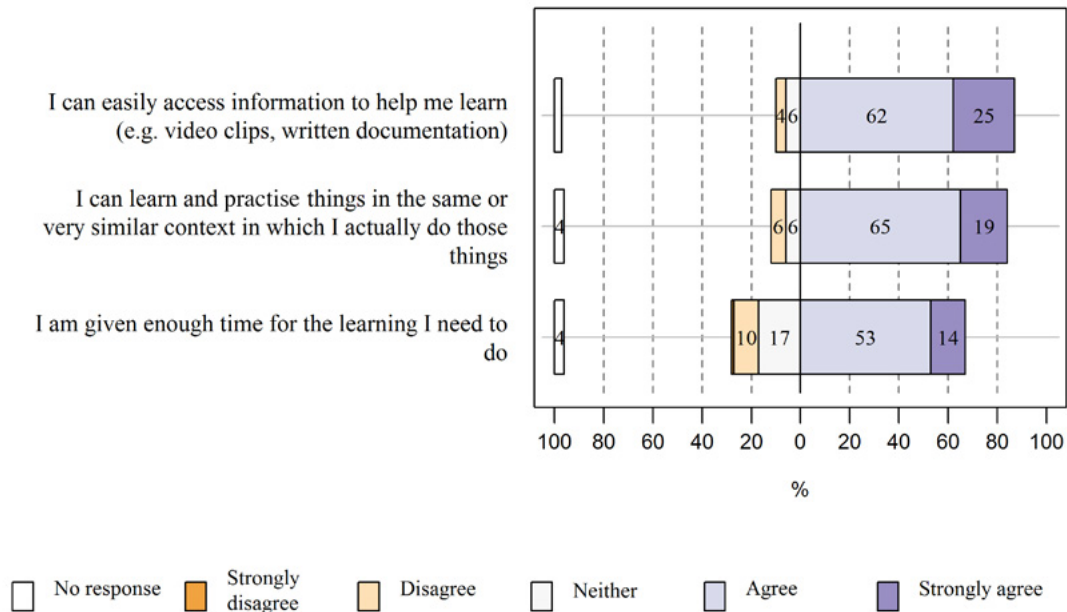
FIGURE 13 Experience of supportive conditions for workplace learning



More women than men thought that, in their workplace, more and less experienced workers talked together about work goals or practices (75%, compared with 65%).

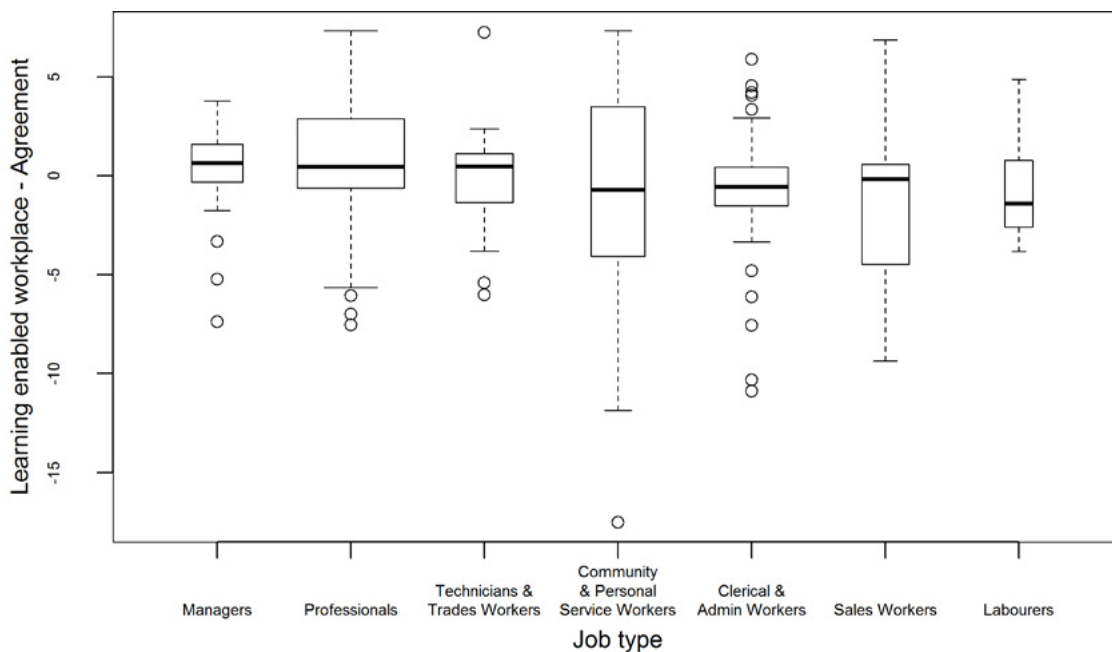
Figure 14 shows that most of the young people agreed that they had enough access to information and support to learn in the workplace.

FIGURE 14 Experience of good conditions for workplace learning



Our factor analysis across the different occupational groups shows that most groups are in learning-enabled workplaces. Managers, professional, and trades and technical workers agree most that they have these opportunities and conditions for learning, and labourers the least. Figure 15 shows quite a few outliers within each occupational group, and wide ranges for the community and personal services, and clerical and administration workers, suggesting differences in opportunities and conditions related to particular workplaces, or different individual understandings of the items we asked.

FIGURE 15 Occupational differences relating to Learning-enabled workplace factor



Business size in relation to workplace learning

Seventeen percent of our participants in work were in small businesses (1–5 employees), 25% in businesses with 6–19 employees, 19% in businesses with between 20 and 49 employees, and 37% in businesses with 50 or more employees. In New Zealand, a third of the businesses with fewer than 20 employees are less than 5 years old (Ministry of Business, Innovation and Employment, 2017), with a 10-year survival rate from 2007 to 2017 of just 26% (Statistics New Zealand, 2017).

Smaller businesses are therefore probably less likely to be able to offer opportunities for formal learning towards qualifications in work time because they are in a more precarious position in the market (e.g., at greater risk from defaulters or disruptions). However, it is theoretically possible for any business to be organised in ways that support learning in the workplace. Indeed, participants who worked in businesses with 1–5 employees gave the highest ratings for the items in the factor Learning-enabled workplaces. Those in workplaces with between 6 and 19 employees gave the lowest ratings.

There were higher levels of agreement about *individually managed* learning opportunities and conditions across all the business size categories, though lower among those in workplaces with 20–49 employees.

Length of time in the job and workplace learning opportunities

People's views of their learning opportunities and conditions were largely unrelated to the length of time they had spent in the job. Those who had been in their current job for over 3 years seemed slightly more likely on average to be in learning-enabled workplaces. Those who had been in their work for 6 months or less were somewhat less likely than others to have good individually managed learning opportunities and conditions. This may be because they were less aware of such opportunities or were not yet being offered them.

Nearly a third would like more workplace learning opportunities

We also asked participants about any learning opportunities they wanted—but did not have—in their workplace. Just over two-thirds did not have any suggestions although, within that group, a few commented on the opportunities they already had or how they could learn more from a change in existing practices.

Several also commented about learning opportunities not being relevant to them. They reported that their job was “just a job”, “for extra money”, “for the money while travelling”, and that they were “just a temp”.

Almost one-third (31%) indicated that they wanted learning opportunities that they were not getting. Most specified an area of capability they would like support to develop, or a programme of learning that would help them in their job. Most also specified areas directly related to their current role in the business or a role they were interested to move into within the same business. But some wanted to upskill to meet demands they already faced—for example, “people management because I manage a team informally”.

Almost half of this group sought learning opportunities that would lead to—or support—progression into other roles within the same business. Management skills were a notable common theme.

I would like something to do with people management. I put forward my interest to my boss a while ago, because supposedly they encourage education in the workplace, but nothing happened.

I have been in management for 4–5 years and feel would like training to move up to regional or training manager.

I want to go the whole management route.

About a third of the desired progression-related learning opportunities were ones that might provide participants with a better sense of where their role fitted in the “big picture” of the business and its line of work.

I would like to ... go out on the road with the ambulances to see the other side of what we do (we work in the comms centre dispatching the calls and services. Same with the other services—police and fire communications centres or the nursing/healthline workers. We are supposed to go visit but we are short staffed.

I want more understanding of the technical side of the company. It is an electrical company and I want to understand more about what they do.

Some wanted learning opportunities to move into a *different* business or career. Some comments indicated that the scope of the business they worked in was too limited or that they wanted to specialise in a particular area but there was no capacity for that. Several mentioned that the employer would only support or fund training directly related to the job they already did.

Some responses did not specify the learning opportunities desired. They instead took the opening provided by our question to express disappointment and frustration over the lack of learning opportunities.

There are limited opportunities to learn new skills and they are not given to everyone. It's based on who you are. There are different levels of the job and some levels require different expertise and these are allocated to mates, and not always shared out fairly. I tend to miss out.

I wanted to finish an apprenticeship as that was promised in my interview but he mucked me about and abused me.

When I applied for the job, there was more in the job description than what I now do—it was drafting reports, research. But I am doing nearly all admin. I would like to do more of the other, to up my skill base.

We don't do many seminars now. We used to.

I am often thrown in the deep end and just have to make it work at the time.

Becoming more effective: Significant learning experiences at work

To find out more about learning at work, we asked if there was a particularly significant work experience that really stayed with them—where they learnt something important.

Most of the young people could think of something—though quite often it was not a single experience but a crystallising of understanding that made them more effective in their work. There were four themes in what they described:

- communicating with others
- rising successfully to work challenges
- taking opportunities to be extended
- learning from near misses, mistakes, and accidents.

Communicating with others

Learning how to listen, and to think of what they could do in response to others' needs and emotions stood out for many in what they had learnt through their work.

How to deal with frustrated people. Often when frustrated they say things that aren't a true indication of what they're like.

Customer service skills, conversation manner, talking and expanding, asking right questions, transparency.

People management is the major thing I've learnt and developed, managing different personalities. In my industry we have designers and engineers who don't always see eye to eye so finding a way to bridge the gap and tell a story is something I have developed.

Did a course on conflict resolution and dealing with complaints and learnt about different types of people and their learning styles, listen to understand rather than listen to respond. This has helped me approach people differently.

The biggest thing is to have patience. When I first started I found it difficult with some customers. I grew to learn to be more patient because my attitude reflected on them.

I did a course on dealing with difficult customers and conflict and after that I had to deal with a very angry customer and I was able to deal with it well and talk the customer down and come to an agreeable solution. The course was really helpful with this.

Rising successfully to work challenges

Work challenges in which the young person had succeeded showed them their own ability, as well as gaining them others' recognition.

I was shipped down south to host and run a seminar which was a big challenge for me. A positive experience.

One of the first projects I worked on in this job, my colleague helped me to deliver my first website which was really well received, got good feedback from the customer. Helped me realise how much I knew and consolidated my skills.

My first meeting with a business that wanted to wholesale my products—it was a very good experience learning to negotiate with external parties/clients and ultimately it was a good experience learning that I could refuse to wholesale products. It was quite scary to go into a meeting as a newcomer who hasn't had that experience before with someone who has been in business for a very long time. In that 2 hours I learned that I didn't have to do what they said just because they had more experience than I do.

Given opportunity to co-curate exhibitions which were not in my job description, but were great opportunities to rise to the challenge and see my work appreciated by the public.

I learnt the value of hard work. There was a period in the business a few years ago when the recession hit. We all worked really hard and brought it together and came out the other end shining.

I was given the task of rolling out a new computer program—trained everyone, including a lot of experienced people—showed I could hold my own with workers reluctant to do the training.

Taking opportunities to gain new knowledge or skills

These opportunities were sometimes on the job itself, sometimes with more senior people taking time to work with them, and sometimes being sent on a course.

Being thrown on the grader. I wasn't expecting it, it was something I wanted to get into.

Assisting different stylists, seeing different ways you can problem solve on the same type of work.

The person I sit next to is really big on technical analysis, he is really receptive to help me analyse and reflect on data patterns ... this is an informal arrangement and really helpful.

I learned a complicated process about inventory control—it was good to learn as not many can do it.

When I worked at ____ the head of division was quite old, there were only four or five of us under 45, so he took us younger ones aside every week for 6 weeks to pass on his knowledge of sales and investment, a bit of a master class to upskill us. It was an important learning and knowledge and confidence building experience.

They sent me to another centre to watch how other teachers do things and that is really helpful especially around behaviour management strategies.

Near misses, mistakes, and accidents

There was some powerful learning reported from getting things wrong. Some of this learning was around safety; some was around preparation and double-checking details, not assuming things would be there or had been done. Some was around their own actions, and some around the actions of others. Some learnt about themselves by realising they were in a situation that did not suit them.

All of the things that have ever gone really badly or wrong, I've learned things from them. Making mistakes teaches you more than always doing it perfectly. For example, when orders haven't been checked and they go out to places and they have the wrong things, that's very serious as if there is anything wrong, they don't pay for any of it and that's serious for a small business.

If you upset a client, you learn not to do it again. I've made a few mistakes, came from my lack of understanding. I went out of my way to learn what to do, so I would not make them again.

Letting emotions get the better of you. I got snippy with a colleague and ended up yelling at them and realise now to take a step back and cool down and stop and think.

My previous job I made a mistake on the live system which taught the importance of being professional and double-checking. Luckily it was able to be rectified. At the time I didn't realise how serious it was.

When I was a chef, there were times when if you didn't take the time to be as prepared as you could be it would throw you back for the whole service. One particular night when I was new I hadn't gone through the fridges to check I had everything I needed. I learnt from this and since then I always triple check.

There was a big management shake-up, so I learnt the importance of communication. They didn't communicate well and I saw how bad it got, which led me to look for another job.

I remember one significant case where a patient wasn't given the correct treatment. So it really makes you think about being on the ball and making sure you know what you are doing all the time.

A cooking oil aerosol can exploded after being too close to the grill, it was loud, scary and dangerous ... no one was hurt and we all learnt from it.

First project I worked on was a very poorly run project by a lazy project manager who wasted a lot of time and money. I learnt heaps from it!

8.

Hindsight

What perspective do 26-year-olds have about their younger selves: about the connections they see between how they tackled life, and how they live now?

We asked them whether there was any support or advice they would give themselves—things they wished they had learnt or known about or known how to do when they were at school, and when they were working out what they wanted to do as an adult. And what advice would they give themselves about looking for work?

Advice to a younger self at school

Making more of school was the main theme here, along with a desire for more knowledge—of themselves, their interests, and of what was possible. Some looked back and would have liked a more signposted future; in contrast, others wished they had been able to ignore common signposts.

Thirty percent wished they had applied themselves more—taken school more seriously, paid more attention, learnt to focus. Some of this hindsight was about the value of having school qualifications; some around the importance of good habits of learning.

To pay attention to feedback and advice—I did too much talking, leaving things to the last minute. Would have become more disciplined.

Wish I had stayed at school instead of leaving quite young—wish I had passed my NCEA. I dropped out with no qualifications.

Wish I'd stuck till end of 7th form rather than leaving midway, I wish I'd asked for help.

Pay more attention in the IT class—many jobs are all computer based these days.

Wish I worked harder, concentrate a lot more, see things through.

Put your head down, arse up and work harder. I cruised along and just passed.

Pay attention more in certain classes, don't stress yourself out about the other ones. I didn't realise what I really needed to focus on. Stop going on Facebook at school.

Wish I'd addressed my lack of motivation and encouraged myself not to give up. Not put things off.

Don't mess around, focus—but I would not have listened!

Have goals, figure out a plan. Doesn't matter if it changes, it will help you achieve.

Fifteen percent wished they had had more confidence, to follow an interest rather than what they or others thought they should be doing, or to leave earlier when they knew what they wanted to do, or to simply be less worried about who they were or what they should do. Some of the thoughts here also expressed the desire to have known more about the range of work available when they were at school.

Not worry so much about the credits and focus on doing what I enjoyed.

You don't need to know what it is you want to do, only what you're interested in. Everyone stresses out about what they are going to do after high school. I think a more useful approach is to think about what you are interested in.

Keeping an open mind to everything you might be interested in. Trying to identify what interests you.

Don't just go to uni or study because everyone else is.

I'd tell myself to leave school a bit earlier rather than staying on till 7th form when I really wasn't getting much out of it.

How broad the working landscape is, there is a wide range of opportunities—do what you are good at.

Life and practical skills such as budgeting, time or project management, writing CVs and job applications, or how to communicate with people in work environments were mentioned by 14%.

I wish schools had life lessons—not just social studies. How to budget, how to go shopping, things you need to know as an adult but no one tells you. My advice to myself would be to be more independent.

Budgeting and life skills, practical communication working in professional environments.

Basic life skills—writing a CV, learning about taxes, interviewing for jobs, that sort of thing.

Better information and advice about careers and study were mentioned by 12%.

Get the right careers advice. The stuff I got wasn't really helpful, became overwhelmed with possibilities, some advice to help me discern a path.

Would have been nice to know what is required for a uni degree (some tried to scare me) ... a lot more was required than I expected.

Maybe, more guidance about what careers are actually out there—the full range—would have helped with study selection (e.g., not just artist, but the different types of art work available).

Wish I'd known more about how to job search ... and had solid career advice throughout high school tailored to our strengths throughout high school.

More support in choosing where you wanted to go after school, careers advice, my experience was that they made a real conscious effort to push you into something ... should be more about what you want to do, and find out what you want.

Some mentioned particular curriculum areas that they wished they had pursued—or not.

A few looked back and wished they had been able to be more relaxed about where they belonged at school, or that they belonged: to have had a sense of a wider world in which they would find themselves.

Advice to a younger self when working out what they wanted to do as an adult

Nineteen percent could think of no advice they would give themselves in hindsight, quite often because they had “always” known what they wanted to do and followed that through, or because things had worked out well. Eight percent said they were still unsure what they wanted to do.

For others, their hindsight advice was mostly around exploring options or following interests and trusting yourself.

Explore options

Twenty-nine percent put the emphasis on exploring options, finding out what was possible, and being open to change—not taking the self as definitely known, or the study or work path as fixed once started.

Be patient with self and explore options before making decisions.

Talking to people and exploring options especially people in different roles to gain understanding of the outside world.

Take the time to think about what you want to do, because I felt pressured, went straight in to beauty therapy—wish I had explored more options.

Explore options so you know what you don't like to help figure out what you do.

Don't be scared to try different things.

Keep an open mind, you have several jobs over a lifetime. Develop transferable skills, be a lifetime learner, have an open mind.

It doesn't have to be one decision for your life. You can change what you do. At school we were told that you have to make the big career choice, when in practice you can change as time goes by.

In the IT sector there is not much info about careers and opportunities out there. It's very male focused and no clear pathways, so talk to more people to access what roles there are out there.

Try to find people in my generation to ask, rather [than] in the older generation when jobs were easier to get.

Remain open minded, don't feel afraid by the prospects or that plans may change. Setting goals is OK and they may change which is also OK.

To know that things aren't permanent and it's OK to give things a go. I think there is a feeling when you finish school that you have to know what you want and that caused me anxiety and I would tell myself it's OK not to know.

Follow your interests

A slightly different take on this matching of self and work or study was advice to follow what interests would sustain attention and motivation, and to trust your own instinct (26%).

I would tell myself that what you are good at is worth doing. Play to your strengths and not worry about what other people are doing and focus on what you are good at.

Put yourself out there and try things, give it a good go and see if you like it or not, make decisions based on what you want, not just [to] follow friends.

Try not to feel pressured to have a career that looks good but that you're not interested in.

I always knew what I wanted to do—my advice would be to just do what you want to do. I worked in a job I didn't really want to do for a few years and wish I had followed my guts with that.

Go with my gut. Always wanted to have my own business but was always too afraid as I didn't think I had enough experience working for other people, but none of the people I work with have experience and it's successful and it just feels right.

Wouldn't care so much about what my parents wanted.

I wish I had known not to be so stressed about it, just let it work itself out. I think that's how I ended up studying something I wasn't interested in. Maybe I would have tried studying something that wasn't so ambitious careerwise but that I enjoyed a bit more.

Some could identify specific skills or qualifications or grades they wished they had gained (9%), and others talked of the value of perseverance, of confidence, or pushing themselves (7%).

Hindsight around looking for work

We asked participants to imagine they could advise their younger selves, based on what they had learnt since. What did they wish they had known about, or known how to do, or what had turned out to be useful, when they were looking for work? Half thought of something, and typically it was about something they had not realised at the time or had learnt the hard way.

Their advice focused on individual qualities or dispositions (40%), practical measures (27%), or taking a broad approach to developing a career (27%).

Act with more confidence and resilience

This advice to their younger self focused on the individual qualities or dispositions they would bring to bear now on any job search. Overwhelmingly, the comments were about acting with more confidence, persistence, and resilience.

Don't be nervous; it's not the end of the world if you get rejected.

Don't try to be something you are not at the interview—it's about fitting into the organisation and it's as much about you as the employer.

In terms of the work culture [I learnt] to expect something a bit different, to be tougher and not take things personally.

[I learnt about] trusting myself more to go for higher level jobs, to not underestimate my abilities.

Develop a good CV and interview skills

Practical measures they would suggest to others or now use themselves in looking for jobs were also a theme. Advice here focused on having knowledge of how to make a good CV, including designing them to stand out and make up for a lack of experience. There were other suggestions about having interview skills and a few about starting a job hunt sooner now that they knew how long it really took or how hard it really was.

Network and be open

A broad approach to fashioning a career was also recommended. Quite a few mentioned cultivating networks or recognising their value. For example, "the more networks you have, the more doors open"; "it's who you know"; "make the right friends"; and "knowing which contacts and networks to use".

Some expressed regret at the pathway taken and wished they had been more open to other options. Some said they simply had not known what they wanted and lacked the experience to make their choices. Overall, the nature of these comments aligned with taking a longer term and more open view of things.

Keep options open and keep trying, keep networking with other people even if you accept a job, don't close doors.

Take opportunities as they present themselves. You don't always get your first choice. Any role can lead to some other, unconsidered future. Take something you're unsure about because it is never too late to change.

Do something that interests you rather than makes the most money.

I should have explored more options.

I wish that I had gotten a part-time job in school so that I had customer experience so it would have been easier to get the jobs I wanted to do. Or maybe studied something better, more useful, or with a better qualification.

When I finished university, my degree was quite broad and I didn't know what I wanted to do with it and I went on to do postgrad. I wasn't sure what path to take when finishing university. I think I should have looked closer at what my degree would give me in terms of career path, treated the degree as a ticket to a better job *eventually* rather than be focused on a particular job.

9.

Discussion

What can we learn from the learning and work journeys these young adults have made? Among this cohort are many who can be thought of as starting on a “well lit” pathway from school (Patterson, 2011), equipped with NCEA qualifications that allowed them a good choice of post-school formal learning towards qualifications that would then open work pathways. This report shows young adults need to make decisions all along the way—the path may be well lit, but for many it is not a single path but one with branches and changing horizons. This suggests that where they are at age 26 may not be where they are at age 30. The work world is changing rapidly and becoming more complex.

Others in the cohort were more attracted to employment than continuing formal learning when they left school. Some found a clear pathway in their chosen field; others have seen the need for formal learning as their horizons change.

The New Zealand Curriculum's overarching vision is for “confident, connected, actively involved, lifelong learners”. What we see with the Competent Learners cohort is just how important ongoing learning is, and how valued it is in leisure as well as work. Since age 20 there was growth in some key aspects of learning capability which reflects not just ongoing formal study, but challenges and opportunities in work and interests.

Only a fifth of the Competent Learners had a clear sense of what they wanted to do when they started their post-school journey to adulthood. When they looked back, they would have liked more understanding of different options, and more confidence to think about them. Sometimes this was related to understanding what post-school study could open up for them. Sometimes it was related to being more confident to follow their interests.

The call continues to grow more support for school students and young adults to have better information about the full range of careers now available, and the qualification pathways that lead to different job clusters. The more varied nature of work and qualifications is adding branches to traditional pathways. The high cost of post-school qualifications is an added penalty for those who choose courses that do not lead to good work options. The experiences and views of the Competent Learners cohort underline the need for better information of this kind.

Their experiences and views also point to the need for career management competencies,¹⁹ to make sense of personal priorities and options, and to make good decisions. They reinforce the importance of *The New Zealand Curriculum's* key competencies, since these are aligned with the “soft skills” increasingly emphasised by the community, including, and especially, employers. These key competencies need to be more to the fore in our schools, and soft skills development explicitly included in post-school formal learning in tertiary institutions and apprenticeships (Vaughan, 2017).

¹⁹ Developing self-awareness, exploring opportunities, and deciding and acting (Ministry of Education, 2009).

References

- Bezanson, L., with contributions from, Arthur, N., Saunders, R., Hughes, D., Browne, V., ... McMahon, M. (2008). *Career development. From under-represented to inclusive: Opening doors to post-secondary participation*. Montreal, Canada: The Canada Millennium Scholarship Foundation.
- Billett, S. (2004). Learning through work: Workplace participatory practices. In H. Rainbird, A. Fuller, & A. Munro (Eds.), *Workplace learning in context*. (pp. 109–125). London, UK: Routledge.
- Buchanan, J., Wheelahan, L., & Yu, S. (2016). *Vocations: The link between post-compulsory education and labour market*. Presented at the New Zealand Vocational Education and Training Research Forum, Wellington. Retrieved from <https://vimeo.com/189222778>
- Carr, M., & Claxton, G. L. (2002). Tracking the development of learning dispositions. *Assessment in Education*, 9, 9–37. <https://doi.org/10.1080/09695940220119148>
- Chamorro-Premuzic, T. (2013). Does money really affect motivation? A review of the research. *Harvard Business Review*. Retrieved from <https://hbr.org/2013/04/does-money-really-affect-motiv>
- Cole, G. (2016). Small talk's big role: How informal learning aids professional development. *Development and Learning in Organizations: An International Journal*, 30(2), 25–27. <https://doi.org/10.1108/DLO-12-2015-0100>
- Colley, H., Hodkinson, P., & Malcolm, J. (2002). *Non-formal learning: Mapping the conceptual terrain*. Leeds, UK: University of Leeds Lifelong Learning Institute.
- Earle, D. (2016). *School to work: What matters? Education and employment of young people born in 1991*. Wellington: Ministry of Education (Tertiary Sector Performance Analysis and Reporting).
- Hodkinson, P., Biesta, G., & James, D. (2008). Understanding learning culturally: Overcoming the dualism between social and individual views of learning. *Vocations and Learning*, 1, 27–47.
- Janssens, L., Smet, K., Onghena, P., & Kyndt, E. (2017). The relationship between learning conditions in the workplace and informal learning outcomes: A study among police inspectors. *International Journal of Training and Development*, 21(2), 92–112. <https://doi.org/10.1111/ijtd.12095>
- Judge, T. A., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behaviour*, 77, 157–167.
- King, T. (2015). *Braided pathways. A report on the 2014 Ara Taiohi National Youth Sector Survey*. Wellington: Ara Taiohi.
- Lo Presti, A. (2009). Snakes and ladders: Stressing the role of meta-competencies for post-modern careers. *International Journal for Education and Vocational Guidance*, 9(2), 125–134. <https://doi.org/10.1007/s10775-009-9157-0>
- Manuti, A., Pastore, S., Scardigno, A. F., Giancaspro, M. L., & Morciano, D. (2015). Formal and informal learning in the workplace: A research review. *International Journal of Training and Development*, 19(1), 1–17.

- <https://doi.org/10.1111/ijtd.12044>
- Middleton, S. (2014). Sector voices. The biggest challenge currently facing New Zealand education. *Education Review, Supplement*, 32.
- Ministry of Business, Innovation and Employment. (2017, June). *Small businesses in New Zealand: How do they compare with larger firms?* Wellington: Author. Retrieved from <https://www.beehive.govt.nz/sites/default/files/2017-12/Small%20Business%20-%20Annex%203%20Small%20Business%20Factsheet.pdf>
- Ministry of Education. (2009). *Career education and guidance in New Zealand schools*. Wellington: Author.
- Ministry of Education, & Ministry of Business, Innovation and Employment. (2016). *Skills at work. Survey of Adult Skills (PIAAC)*. Wellington: Author.
- Patterson, L. (2011). *Tracks to adulthood—Post-school experiences of 21-year-olds: The qualitative component of Competent Learners @ 20*. Wellington: Ministry of Education.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J.-P., Duarte, M. E., Guichard, J., ... van Vianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behaviour*, 75(3), 239–250. <https://doi.org/10.1016/j.jvb.2009.04.004>
- Statistics New Zealand. (2017). *New Zealand business demography statistics: At February 2017*. Retrieved from: <https://www.stats.govt.nz/information-releases/new-zealand-business-demography-statistics-at-february-2017>
- Vaughan, K. (2008a). *Student perspectives on leaving school, pathways and careers* (Report No.4 from the age-16 stage of the Competent Children, Competent Learners project). Wellington: Ministry of Education.
- Vaughan, K. (2008b). *Workplace learning: A literature review*. Wellington: NZCER Press.
- Vaughan, K. (2011). The potential of career management competencies for renewed focus and direction in career education. *New Zealand Annual Review of Education*, Vol 20, 24–51. <https://doi.org/10.26686/nzaroe.v0i20.1569>
- Vaughan, K. (2017). The role of apprenticeship in the cultivation of soft skills and dispositions. *Journal of Vocational Education and Training*, 69(4), 540–557. <https://doi.org/10.1080/13636820.2017.1326516>
- Vaughan, K., O’Neil, P., & Cameron, M. (2011). *Successful workplace learning: How learning happens at work*. Wellington: Industry Training Federation.
- Vaughan, K., Roberts, J., & Gardiner, B. (2006). *Young people producing careers and identities. The first report from the Pathways and Prospects project*. Wellington: NZCER.
- Vaughan, K., & Spiller, L. (2012). *Learning to fly: Career management competencies in the school subject classroom (Research Report No.8)* (EEL Research Report No.3). Lincoln: AERU Research Unit of Lincoln University.
- Wylie, C., & Hodgen, E. (2011). *Forming adulthood: Past, present and future in the experiences and views of the Competent Learners @ 20*. Wellington: Ministry of Education.

