



Student Perspectives on Leaving School, Pathways, and Careers

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New Zealand Council for Educational Research

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CL @ 16 is the seventh phase of the Competent Children/Competent Learners longitudinal study.

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Introduction

This is the fourth in a series of reports from the age-16 stage of the longitudinal Competent Children, Competent Learners project, funded by the Ministry of Education (MOE) and the New Zealand Council for Educational Research (NZCER). The project has been tracking the development of a group of around 540 from just under age five (in 1993) through school, analysing the impact of different experiences and resources on a range of competencies.¹

This report tackles a specific subset of the data gathered when students were 16 years old and focuses on the 420 students still at school.² It answers the questions: What do secondary school students at age 16 think about what leaving school will be like? What are their biggest concerns and their most anticipated opportunities? What do they see as the most likely barriers to having the kind of life they want? How do they envisage spending their first year out of school? What are their occupational aspirations, connections, influences, and motivations? What does the idea of “career” mean to them?

The transition landscape of student choice

These questions are about students’ perspectives—perspectives which have come to matter more than ever in the current youth transition landscape. That landscape emphasises student choice amidst an expanded number and complexity of possibilities, within a “pathways framework” built on three system-wide shifts occurring in the past decade (Vaughan, 2004):

- a deregulated tertiary system (though some regulation and the elimination of course duplication is being reintroduced via different funding mechanisms);
- the development of a National Qualifications Framework, designed to be flexible, credible to employers, schools, and tertiary institutions, and use criterion or standards-based assessment; and
- an increase in career development support for a wider range of post-school careers, especially vocational ones, together with an increase in the status of vocational careers, in order to improve labour supply, alleviate skill shortages, and provide meaningful work opportunities for young people.

This framework sustains a number of initiatives that aim to support students and young people by positioning them as the key decision makers. Despite differences in where and how they support young people, the Secondary-Tertiary Alignment Resource (STAR), the Gateway scheme, Creating Pathways and Building Lives (CPaBL), and the recent Better Tertiary and Trades Training Decision Making (BTTTDM) service and new Schools Plus scheme tell young people that their background or rate of school success is no obstacle to their making choices and finding—and creating—an individual and successful pathway from school to career (Vaughan, 2005).

¹ The Competent Children, Competent Learners study is a longitudinal study of a sample of New Zealand young people, who have been followed every two years since 1993 from their final early childhood education centres in the Wellington region. The main aim of the project is to chart the development of competencies in the context of home, leisure, and educational experiences that may account for differences in patterns of development and young people’s performance. Four other reports from the age-16 phase accompany this one, together with an overall summary. These reports and ones from the earlier phases of the study are available at www.educationcounts.govt.nz, with and associated papers, the NZCER website, www.nzcer.org.nz

² There were 420 students still at school when the data were gathered; 27 had left school and there is a section on those 27 students in the companion report *On the Edge of Adulthood* (Wylie, Hipkins, & Hodgen, in press).

Two major issues arise from this situation. The first is that while young people are required to make decisions about an ever-increasing range of in-school courses and post-school possibilities, they receive no real preparation for doing this well. Schools—the major site of school-to-work transition preparation for most young people—are not yet in step with many knowledge society shifts that have affected labour markets, skills demands, employer–worker relationships, and the very nature of “career”. The second issue is that those in-school and post-school possibilities for young people continue to be structured by family and background experiences and resources, and by school experiences and in-school learning systems. Yet the “pathways framework” and its underpinning invocation of “choice for all” means our understanding of young people’s transition from school implicitly sidesteps any recognition of the structural constraints around those choices. The danger is that we may miss patterns of inequality, misreading them for individual failure to make a good transition. We will revisit these ideas throughout the report and, in particular, in the conclusion.

Report structure and analysis

The Competent Children, Competent Learners study has consistently shown up differences in patterns of engagement with early childhood education and school and what might be done to reduce the gaps in achievement between different groups of students. This report also shows up patterns in relation to the transition from school and students’ aspirations and ideas about career. This report is able to be more comprehensive than many other studies on student career and transition perspectives because we have been able to draw on the full scope of Competent Children, Competent Learners in its collection of data on a range of competencies and its building of rich profiles of students in their lives at, and beyond, school. It means, for example, that we can relate students’ careers and transition ideas and experiences to their ideas and experiences of school and to measures of their competencies, as well as measures of their social characteristics such as gender, ethnicity, mother’s qualifications and family income, and school–social mix (e.g., school decile).

There is an important caveat about the study’s sample in that its original focus in 1993 meant that sampling units were early childhood education centres,³ chosen from one particular region in New Zealand, rather than individual participants’ social characteristics. So, although the sample contains fairly even proportions of males and females, there are lower proportions of Māori, Pacific, and Asian young people and higher proportions of young people from high-income families, with mothers who have trade or tertiary-level qualifications, than the New Zealand national average. However, despite not being nationally representative, it does have sufficient numbers to enable comparisons of students with different social characteristics and different experiences. The sample is a useful source of data regarding young people’s ideas about leaving school and establishing themselves and their careers in relation to other factors in their backgrounds and lives. Where there are differences related to differences in social characteristics, it also makes for a more positive picture of young people and their perspectives than there might have been with a more nationally representative sample—food for thought when reading the rest of this report.

³ The study originally aimed to find out about the development of competencies considered important in becoming and being lifelong learners and, in particular, how early childhood education might contribute to those. It has since expanded to include measures of school engagement and achievement, friendships, and family relationships.

Table 1: Social characteristics of the sample of students still at school at age 16

	(n = 420)	%
Family income (at age 16)		
Low income (< \$40,000)	112	27
Medium/high income (\$50–\$100,000)	168	40
Very high income (\$100,000+)	140	33
Maternal qualification		
None	49	12
Trade/Mid-secondary	209	50
Senior secondary/Tertiary	77	18
University	82	20
Not known	3	>1
Gender		
Male	216	51
Female	204	49
Ethnicity		
Pākehā/NZ European	339	81
Māori	38	9
Pacific	18	4
Asian	13	3
Other	12	3

The report is divided into sections analysing questions or sets of questions asked of students. Some questions were open (e.g., name up to three occupations in which you are interested), some were “tick all that apply”, and some used scales (e.g., from agreement to disagreement).

Each section title contains the main idea in the question asked of students and begins with a rationale about what we asked students, why, and how. We then report on frequency data and cross-tabulations of that frequency data against a range of different measures that add some contextual data to the patterns of responses. We report only the statistically significant associations, based on cross-tabulations, that had a chi-square value at the $p \leq 0.01$ level (indicating a one in 100 odds that the association has occurred by chance). The range of measures used in this report, drawn from the wider project, are shown in the following table.

Table 2: Overview of measures used

Variable name	Describes...
Family income at 16	Three groups: under \$40K annually; \$40–\$100K annually; over \$100K annually.
Decile	Deciles 1/2, 3–8, and 9/10.
Ethnicity ⁴	Pākehā/NZ European/Asian or Māori/Pasifika.
Gender	Female or male.
Mother's qualifications	No qualifications; early secondary qualifications; trades/post-secondary qualifications; and university/tertiary qualifications.
Cognitive composite competency	A mean of three scores: literacy, numeracy, and problem solving.
Focused and responsible	A scale for teacher ratings of student problem solving, persistence, listening, concentration span, punctuality, finishing class work, learning from mistakes, remembering and carrying out instructions, meeting goals student has set, student choosing work to further own knowledge/skills. The "Thinking and Learning" variable yielded very similar patterns of cross-tabulations and so was not used separately in this report.
Social skills	A scale for teacher ratings of student respect for others' points of view or ways of doing things, appropriate presentation of own point of view even where disagreement, support for others in classroom, keeping things smooth, or resolving disputes with peers.
Attendance at school	A scale based on school ratings from excellent to seldom attends.
Social difficulties	A scale for teacher ratings of student mixing with other students who are in trouble or anti-social, peer pressure influence to do out-of-character things, hassling/bullying of other students, and being hassled/bullied by other students. We show this scale in <i>reverse</i> throughout the report so that a <i>low</i> rating is shown as having social difficulties.
Enjoyment of reading	Parent reports of student's enjoyment at ages 8 and 10 and student's self-report at ages 12 and 14 according to whether they always enjoyed reading, mainly yes or a qualified yes to enjoying reading, or reported not enjoy reading at least twice.
Risky behaviour	A scale that includes these items: drinking alcohol, regrettable behaviour when drunk, having sex, trouble with police, physical fighting, romantic relationship troubles, getting behind in school work, lying about something that someone else did. We show this scale in <i>reverse</i> throughout the report so that a <i>low</i> rating is shown as having risky behaviour.

⁴ The numbers of Māori and Pacific young people left in the study at age 16 are lower than desirable. However, our caveats about this low number are tempered by the fact that our findings for this sample are consistent with other studies of Māori and Pacific students' performance. At age 16, we had participation from 45 Māori, 18 Pacific, 13 Asian, and 360 Pākehā young people. Because we did not have sufficient numbers of Māori, Pacific, and Asian young people to analyse separately, we brought together the ethnic categories whose age-14 competency levels were most similar, so that we had groups of sufficient size for comparison. These groups are Māori/Pacific, and Pākehā/Asian.

Variable name	Describes...
Motivation at 14	<p>Three groups based on parent reports of student's perceived value of education, and long-term ambition of the student and for the student by their parent. The highest group is university/professional orientation and high faith in gains from school. The middle group refers to students less positive of gains from school and less sure of future goals. The lowest group refers to aiming for skilled/unskilled jobs, low conviction about gains from school.</p>
Subject cluster	<p>Clusters based on subject choices for Year 11 and Year 12 students, similar to a cluster analysis first used in the Learning Curves research.⁵ The analysis yielded four clusters of subjects.</p> <p><i>Traditional academic, arts orientation:</i> more likely to take course assessed by Achievement Standards (AS) in maths, visual art, music, economics, accountancy, graphics, one or more languages, geography, history, design or fabric technology, the English Unit Standard (US) that requires reading a range of texts, and at Level 2 more creative options among the English AS, photography.</p> <p><i>Traditional academic, science orientation:</i> more likely to take course assessed by AS in maths, physical education, economics, science subjects (science in Year 11, and biology, chemistry, physics, etc. in Year 12), geography.</p> <p><i>Contextually-focused options:</i> more likely to take food technology, outdoor/sport options, physical education, visual art, fabric or other soft technology options, geography, computer oriented options, text information management, a course with a mix of US and AS in maths, life skills, hospitality or tourism.</p> <p><i>Vocational orientation:</i> more likely to take food technology, physical education, dance and/or drama, music, one or more of the hard technology options, text information management, life skills US, hospitality or tourism, US-assessed courses in maths and English, science (US at Level 2), business studies, other technology options.</p>
Total no. of Level 1 NCEA credits	<p>Four quartiles, based on overall number of NCEA credits gained at Level 1—i.e., across all subjects.</p>

⁵ See Hipkins, Vaughan, Beals, and Ferral (2004), Hipkins and Vaughan, with Beals, Ferral, and Gardiner (2005), and Ferral (2005).

Student perspectives on leaving school

Best things about leaving school

As a broad framing question, we asked students what they thought would be the best things about leaving school. We provided a series of statements from which students could choose a level of agreement, covering relevant themes for young adults approaching the point of transition from school—changes in maturity and social status, new choices and decision making opportunities, new responsibilities, increased financial means and imperatives, different learning situations, and changing relationships and routines. Although the focus of this report is on careers and the transition from school, keeping this question broad allowed us to situate young people's careers and transition perspectives in relation to the broader context of early adulthood.

Student responses show an overall positive and open outlook on leaving school. More than 50 percent of students agreed or strongly agreed with 14 of the 18 statements. In other words, few items were not seen as being “best things” about leaving school. More than three-quarters of the students agreed or strongly agreed with many of the statements focused around making decisions and having a greater range of choices (or having the means to follow up different choices):

- earning money (85 percent);
- more freedom to choose what to do with my time (83 percent);
- being treated as an adult or being an adult (82 percent);
- making my own decisions about life (81 percent); and
- meeting different kinds of people than I met at school (80 percent).

Most students also agreed or strongly agreed with statements about learning and career or work:

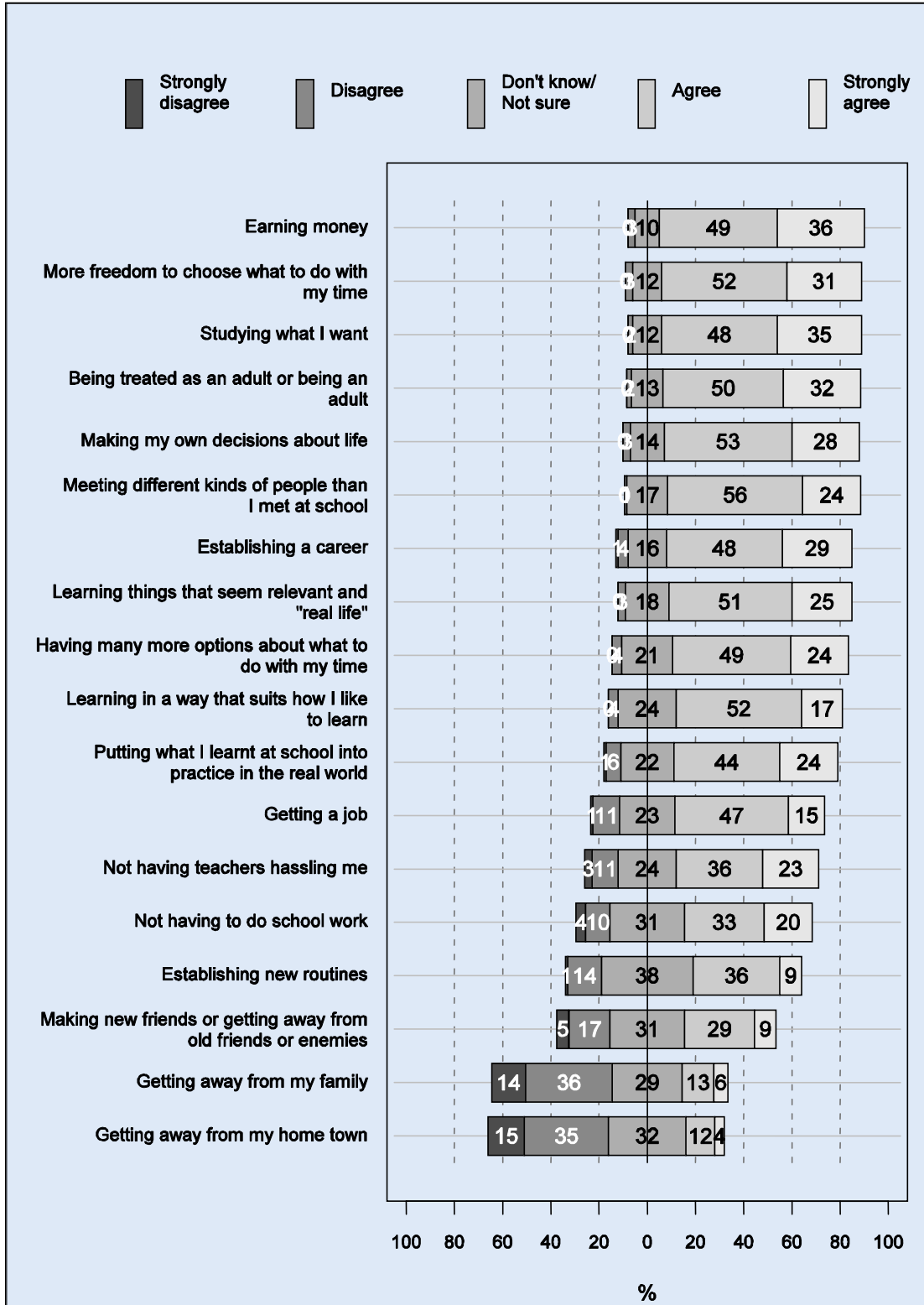
- studying what I want (83 percent);
- establishing a career (77 percent);
- learning things that seem relevant and “real life” (76 percent);
- learning in a way that suits how I like to learn (69 percent); and
- putting what I learnt at school into practice in the real world (68 percent).

While *earning money* was the “best thing”, drawing the most overall agreement from students (85 percent) and the most strong agreement (36 percent), the main means for earning money, getting a job, drew less overall agreement (62 percent) and far less strong agreement (15 percent). This suggests that while students are thinking positively about having choices and making decisions, they may be slightly less positive about the responsibilities that come with these (e.g., actually getting a job and performing in that role).

There is also a difference in levels of overall agreement for “establishing a career” (77 percent) and “getting a job” (62 percent). It is possible that the former may be aligned with choices and decisions and the latter aligned with responsibilities and new pressures or developing new skills and relationships which seem more challenging. The only three statements to get less than 50 percent of students' agreement were to do with re-orienting relationships and living situations: making new friends or getting away from my old friends or enemies (38 percent agreement); getting away from my family (just 19 percent agreement and 50 percent disagreement); and getting away from my home town (just 16 percent agreement and 50 percent disagreement). Around a third of students were unsure about these three statements (29–32 percent).

The following figure shows the statements about what is best about leaving school in order of the frequency with which students strongly agreed or agreed with them.

Figure 1: What is best about leaving school?



There were some statistically significant relationships between some of the measures used throughout the Competent Children, Competent Learners project and the statements most closely related to a transition *away from* something (e.g., “not having to do school work”, “getting away from my family”, “not having teachers hassling me”) or involving a new responsibility (e.g., “establishing new routines”, and “getting a job”). These are discussed in the following subsections.

It is interesting that we found no statistically significant relationships between some other measures and the best things about leaving school. For example, students with low levels of motivation at 14 were just as likely as students with high levels of motivation at 14 to agree with statements about ongoing learning, such as “studying what I want” and “learning things that seem relevant and ‘real life’”.

Breaking out of school

Other than students whose mothers had no qualifications (63 percent), the overwhelming majority of students (92 percent tertiary/senior secondary, 90 percent university, and 84 percent trade/middle secondary) agreed/strongly agreed that studying what they want is a best thing about leaving school.

Students not doing well in areas closely aligned with behaviours and competencies favoured by school were more likely to agree that not having teachers hassling them and not having to do school work would be best things about leaving school. The following table shows the variables associated with agreement with “not having teachers hassling me”. Students scoring in the lowest quartiles or categories for these variables agreed or strongly agreed more than students scoring in the highest quartiles or categories. Notably, there were no associations here for gender, ethnicity, and school decile.

Table 3: Agreement with “not having teachers hassling me”

	Lowest quartile or category	Highest quartile or category
	% who agreed or strongly agreed	
Risky behaviour (reversed)*	85	40
Focused and responsible	80	40
Total no. of Level 1 NCEA credits	80	30
Social skills	77	47
Social difficulties (reversed)*	74	53
Cognitive composite competency	73	47
Mother’s qualifications	60 (none)	44 (university)
Family income at 16	55 (< \$40K)	45 (> \$100K)

* As mentioned in the Table 2 overview of measures used, the scales of risky behaviour and social difficulties are reported in reverse: *low* ratings on these two scales are shown in our tables as *more* risky behaviour or *more* social difficulties.

A distinction also showed up for subject cluster. Compared to academic students (37 percent arts and 61 percent science), more non academic students (71 percent contextual and 78 percent vocational) agreed/strongly agreed that a best thing about leaving school would be not having teachers hassling them.

These students in non academic courses were also more likely to agree that “not having to do school work” was a best thing about leaving school. The following table shows the other associations with students’ agreement with “not having to do school work”. Students scoring in the *lowest* quartile for several variables were more likely than

those scoring in the highest quartile to agree or strongly agree. This pattern suggests that students scoring in the lowest quartile for these variables are not as likely to have been behaving in the ways that school values (or that teachers *don't* hassle you about). Students in the lowest quartiles may be showing a desire to get away, not just from school work and teacher hassles, but from school itself.

Table 4: Agreement with “not having to do school work”

	Lowest quartile or category	Highest quartile or category
	% who agreed or strongly agreed	
Social skills	67	43
Risky behaviour (reversed)	67	43
Total no. of Level 1 NCEA credits	65	20
Cognitive competency	59	39

Other than academic arts students (35 percent), more than half of the other students (65 percent contextual, 58 percent science, and 54 percent vocational) agreed/strongly agreed that not having to do school work would be the best thing about leaving school. However, this does not necessarily mean that academic arts students enjoyed their school work more, as 51 percent of them gave a neutral response to the statement. It may also be that students in different clusters had different reasons for thinking not having to do school work was a best thing about leaving school. For example, students taking contextual and vocational subjects tend to be less well catered for than students taking academic subjects (Hipkins, 2005) so these students may not have enjoyed many of their school subjects. In *On the Edge of Adulthood*, we found that students in the vocational and contextual clusters had lower average scores on many variables, whether it was their own reports of school engagement, teacher reports of their attitudes and approaches, or, to a lesser extent, their reports of their relationships with family, and parent views of their attitudes (Wylie et al., in press). Students taking science subjects may appear to be better catered for by virtue of taking academic subjects at school but may actually be looking forward to tertiary-level study or study in a tertiary context where they are even better catered for—there is evidence that some students take certain science subjects “under sufferance” because they are prerequisites for tertiary courses (Hipkins, Roberts, Bolstad, & Ferral, 2006), which would explain their tendency to align with non academic students in agreeing with “not having to do school work”.

Students who were *less* likely to want to get away from school-related stresses were also the most likely to *disagree* that “getting away from family” and “getting away from home town” were the best things about leaving school.

Breaking away from home

Students in the lowest quartile for risky behaviour (35 percent) were more likely to agree/strongly agree that getting away from their families would be one of the best things about leaving, in contrast with students in the highest quartile (15 percent). However, in the following table there are associations with enjoyment of reading and cognitive competency for *disagreement* with “getting away from family”.

Table 5: Disagreement over “getting away from family”

	Lowest quartile or category	Highest quartile or category
	% who disagreed or strongly disagreed	
Total no. of Level 1 NCEA credits	33	85
Cognitive competency	37	59
Enjoyment of reading	28	53

When it came to disagreement with “getting away from my home town”, students in the highest quartile for enjoyment of reading (55 percent) were more likely than students in the lowest quartile (16 percent) to disagree that this was a best thing about leaving school.

For secondary school students, getting a job is possibly one of the options most different from being a school student. There is not necessarily any formal study or training involved, it confers the status of “employee” rather than “student”, and offers a level of (financial) independence. The pattern of motivation at 14 and social difficulties variables associated with getting away from school-related stresses and home or family as “best things” also appear in terms of students who see “getting a job” as a “best thing”, although the differences between groups are not as marked here.

Table 6: Agreement with “getting a job”

	Lowest quartile or category	Highest quartile or category
	% who agreed or strongly agreed	
Motivation at 14	70	60
Social difficulties (reversed)	70	54

Hardest and easiest things about leaving school

We asked students what they thought would be the hardest and easiest things about leaving school, again providing them with a range of different statements from which they could choose a degree of hardness or easiness. Like the question about “best things” in leaving school, this question covered a wide range of aspects about leaving school. However, it differed from the “best things” question in that it aimed to get a sense of the degree of challenge students associated with each aspect of leaving school. We wanted to gain some insight into students’ perspectives as young people who were “responsibilised” through a secondary school system that requires them to make complex decisions about subject choice, school (and workplace learning) programmes, and career plans, linking them to an increasing range of individualised school–tertiary–work options and pathways (Vaughan, 2003), and even “producing”, rather than simply gaining, their school-based qualifications (Hipkins, 2005). So we wanted to know whether and how hard students thought some of these decisions and possible options would be.

The frequency data show that leaving school is generally seen in challenging terms. For example, of the 17 items provided, students rated nearly twice as many items hard (11 items) as they rated easy (six items). The items rated hardest by more than half of the students tended to be focused on career or pathway decisions (“establishing a career”, 65 percent; “working out what I want to do”, 53 percent), and on management of new routines and options around time, money, and tertiary study (“having less time to spend on leisure activities or

with friends”, 65 percent; “managing my money or earning enough money”, 59 percent; and “learning how to do assignments or learn study skills at tertiary level”, 61 percent).

Several statements drew a high proportion of neutral responses from students, suggesting that they did not have enough knowledge about some issues or areas to know how hard or easy this change might be. Around half of the students were neutral on “still living with my family and would rather not” (47 percent), “feeling bored or not challenged enough” (55 percent), and “size of the institution I will go to” (44 percent).

There were a number of interesting distinctions in students’ perceptions about what is harder or easier. Students saw “finding a job” as easier than “establishing a career”. Media publicity about high employment rates, skills shortages, and employer readiness to recruit, train, and retain workers may have contributed to a perception that actually finding a job is not necessarily difficult (and students rated “learning a new job” as harder than finding it). However, since 41 percent of students were neutral on “finding a job”, it may be that they simply do not have yet enough labour market information or experience to know how hard or easy this might be.

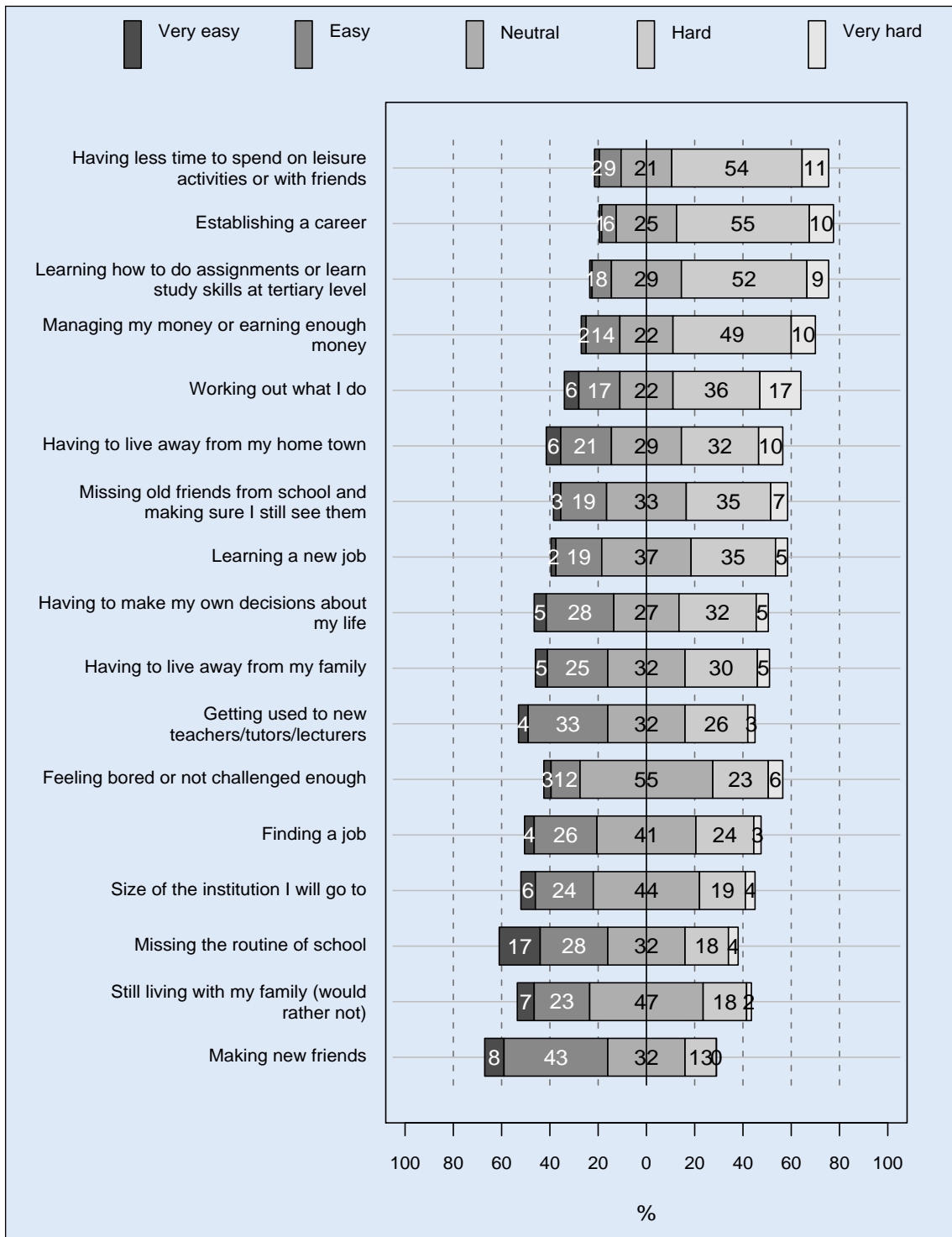
Students are also possibly distinguishing between a job as utilitarian (for example, a way to earn money) and career(s) in terms of broader questions of work and lifestyle choices and personal identity. Career has become more of a long-term process involving a series of decisions and activities over time—a process rather than a structure (Wijers & Meijers, 1996). Students may well have a sense of this, particularly where it involves further studies before (and also even after) finding a job. Thus the nature of the modern career has been shifting and theorised as “boundaryless” (Arthur, Inkson, & Pringle, 1999) and “produced” rather than simply entered or found (Vaughan & Roberts, 2007). This means that for today’s students, the life task of *finding* a job (and keeping it) becomes less important than finding jobs repeatedly throughout life (Wijers & Meijers, 1996).

It may also be finding jobs throughout life now depends more on figuring out what you want, rather than following a set path. Students rate “working out what I want to do” as harder than “finding a job” but easier than “establishing a career”. Making things work in the larger sense of establishing a career is yet another challenging step beyond choosing something or making a decision about what you want. This is particularly so given that what you want is likely to involve a series of decisions and different activities and to change over time.

Students’ responses also indicate a distinction between “learning how to do assignments or learn new study skills at tertiary level” (61 percent hard or very hard) and “getting used to new teachers/tutors/lecturers” (29 percent hard or very hard). Students may be acknowledging that tertiary-level study requires different skills than that of school-level study but that the new relationships involved (student–lecturer/tutor/teacher) either do not require very different skills from their school experience or expectations of student–teacher relationships or not seen as a major component of tertiary study success.

The following figure shows student perceptions of hardness or easiest for each item, ordered from very hardest and then hardest, down to easiest and very easiest.

Figure 2: What is hardest or easiest about leaving school?



Moving from secondary study to tertiary study

There were statistically significant associations between two tertiary study items and four of the Competent Children, Competent Learners measures: cognitive composite competency, enjoyment of reading, focused and responsible, and mother's qualifications.

Students in the highest quartile for cognitive composite competency (65 percent) were more likely to think assignments and study skills would be harder than students in the lowest quartile (48 percent). This may be because the highest quartile students in these categories are more likely to undertake tertiary study at university or have more information about the challenges of undertaking tertiary study. Students who scored in the highest category for enjoyment of reading (61 percent) were also more likely than those in the lowest category (50 percent) to think that "learning to do assignments/learn study skills at tertiary level" would be hard. Those who scored in the highest category (60 percent) tended to think "working out what I want to do" was harder than students who scored in the lowest category (32 percent).

Some students were also more likely to "miss the routine of school". Almost a third (31 percent) of students in the highest quartile for focused and responsible thought that missing the routine of school would be hard/very hard, compared with just 15 percent of students in the lowest quartile. Students with mothers with no qualifications (27 percent) and students with mothers with university qualifications (31 percent) were both more likely than students with mothers with trades/middle secondary qualifications or tertiary/senior secondary qualifications to see missing the routine of school as hard/very hard. However, they are likely to do so for different reasons. Students with mothers with no qualifications are less likely to go on to tertiary study and enter professional or technical (and associated professional) occupations, suggesting their options are fewer (see Section 3). So this small group may be more likely to miss the routine of school because it offers a known option and schedule of activities that may contrast with the potential for less secure options. Students with mothers with university qualifications may be more likely to miss the routine of school because they are more likely to also be associated with behaviours that schools value (and they may therefore enjoy school more).

Gender differences

There were few gender differences. Overall, female students tended to be more anxious about leaving school than male students. Female students seemed particularly concerned with maintaining old relationships, or establishing new ones, compared with male students. They were also more concerned with the practical issues of managing or earning money and with tertiary study skills. The following table shows the differences between males and females in relation to different things that students found hard and very hard.

Table 7: Gender differences for hard and very hard things about leaving school

	Male	Female
	% who agreed or strongly agreed	
Having less time to spend on leisure activities or with friends	61	72
Learning how to do assignments or learn study skills at tertiary level	52	72
Manage money/earn enough money	48	72
Missing old friends from school and still seeing them	35	50
Living away from family	32	41
Size of institution expected to attend	18	31

The pattern in the previous table continued with male students tending to show more confidence than female students in a number of areas. Male students were more likely to embrace aspects of launching into post-school life—moving away from school routines, establishing new teacher/lecturer/tutor relationships, making their own decisions about life, and finding a job.

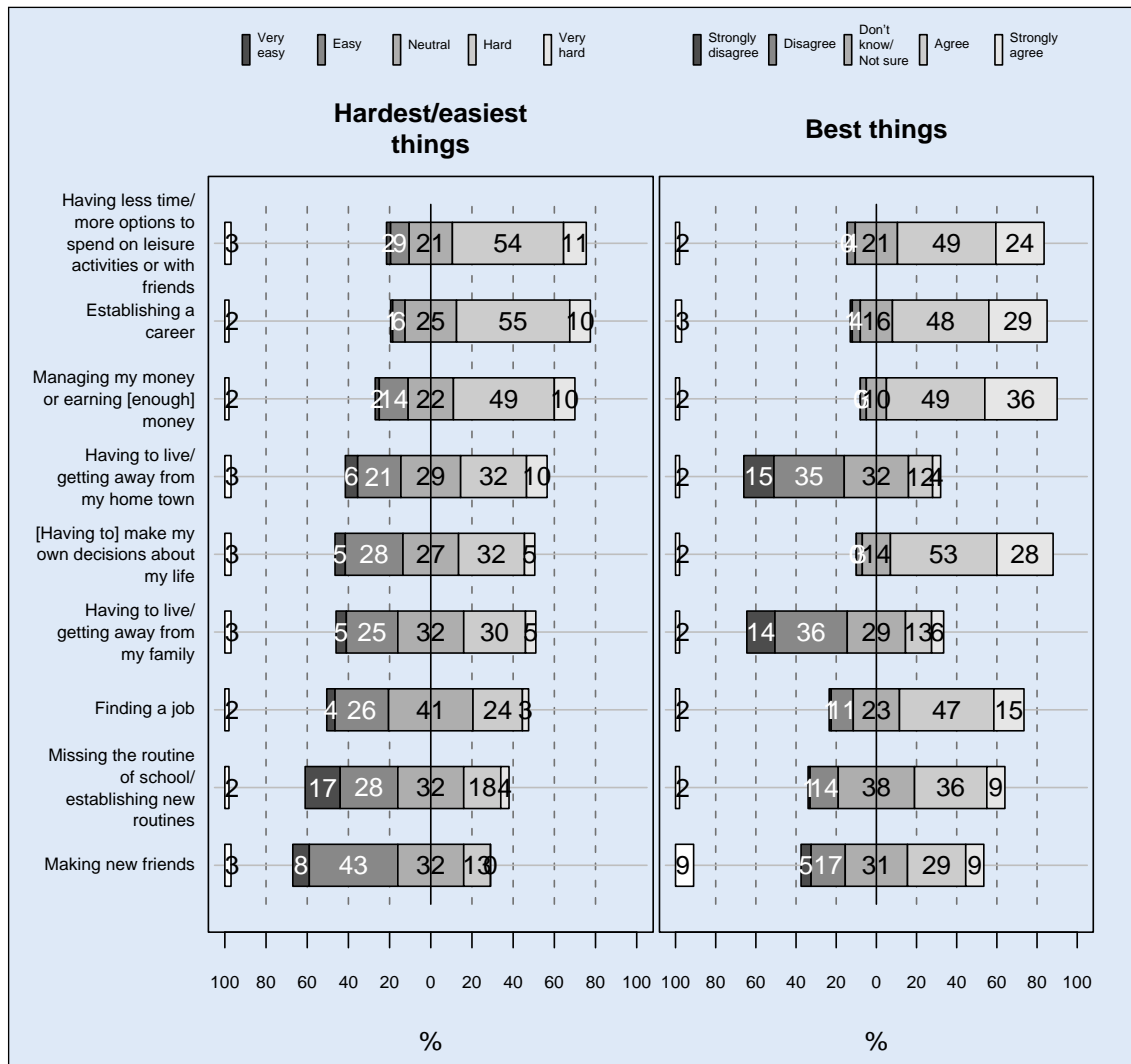
Table 8: Gender differences for easy and very easy things about leaving school

	Male	Female
	% who agreed or strongly agreed	
Miss or forego the routine of school	56	34
Get used to new teachers/lecturers/tutors	47	27
Making own decisions about life	41	25
Find a job	39	21

Best things and hardest things

When similar items from the “best things” and “hardest/easiest things” questions are viewed alongside each other, an interesting “good news/bad news” story emerges. The things that students considered best about leaving school also tend to be the things they considered hardest about leaving school. The following figure illustrates this story through a number of item pairings. These pairings show that for most of the responding students, family and home town are regarded positively and most “disagree” or “strongly disagree” that leaving them would be “best” and think that leaving them would be “hard” or “very hard”. However, students regard a number of items related to career, options for their time and leisure, and managing money as the best things, but also the hardest things, about leaving school.

Figure 3: Comparing the hardest/easiest things about leaving school with the best things about leaving school



That the tasks or issues seen as most challenging are also seen as providing the best rewards and satisfactions points to anxiety about the life tasks ahead. Researchers have measured complex relationships between dimensions of security and exploration in young people's transition narratives (Vaughan, Roberts, & Gardiner, 2006) and mapped responses to ever more insecure employment options (Mills, 2004). Young people's anxiety has been theorised as a generational issue related to rapidly increasing options and choices (Mackay, 1997), increased pressure leading to commitment delay (du Bois-Reymond, 1998) and "just-in-time and just-in-case" commitment balancing acts (Vaughan, 2005).

These kinds of insights have also been theorised in terms of an increasing emphasis on individual responsibility and choice in modern societies that masks the way that social structures continue to constrain or enable choices for individuals or groups (Furlong & Cartmel, 1997; te Riele, 2005). In other words, when modern societies pose issues and possibilities in terms of individual choice and responsibility, there is a double-edged sword which confers greater freedoms upon the individual to move beyond some boundaries and limits, as well as an onus on the individual to make things work well in their life through their own individual efforts and (use of) resources—and the fact that some of these boundaries and limits remain and operate at a societal level (e.g., there are

patterns of inequality), may remain hidden behind the rhetoric of individual choice and responsibility. Some of these patterns appear through the social variables used in this report.

In New Zealand, modern educational structures constrain or enable choices through the establishment of a “pathways framework” which presents educators and most young people at the secondary school level—including our 16-year-old participants—with a wide range of possibilities for school subjects, qualifications, secondary–tertiary course alignment, and post-school study and career options (Vaughan, 2004). While there are many more options and choices, secondary students are not necessarily well equipped to make the decisions required by these new possibilities, raising questions about school-based provision of career *information* as well as career development *skills* for students (Vaughan & Gardiner, 2007). Some New Zealand research has highlighted a particular anxiety around career decision making and the comprehension and applicability of career information and guidance for students and young people (Higgins & Nairn, 2006; Vaughan, 2005; Vaughan et al., 2006). This anxiety is exemplified in students’ perceptions about the attraction to, and challenges of, establishing a career as well as other life tasks which now carry a greater range of possibilities and choices (for example, more choice about one’s own time but concerns over how to manage it, and more chance to earn money but an awareness that it must be managed and that adulthood also carries more financial responsibilities). It seems likely that students in our sample are reflecting an awareness of, and level of anxiety about, these issues through their responses which emphasise the “good news” (new opportunities) and the “bad news” (new responsibilities or loss of the familiar) of modern youth transition.

Intended activities in the first year of leaving school

We asked students to indicate what they expected to be doing during their first year of leaving school. Students were able to indicate more than one activity or pathway, in keeping with research which has shown young people often change activities or pathway options after leaving school and often have “back up plans” or multiple pathways in mind (Vaughan, 2005; Vaughan et al., 2006). Therefore our questions aimed to get indicators of the level of likelihood of their engagement with a range of different study, training, employment, and unpaid work options.

Post-school options

Over two-thirds of the students in this study expected to attend university (69 percent) and this was easily the most popular tertiary education choice. Less than a fifth expected to be engaged in study in institutions or via pathways other than university (19 percent polytechnic, 16 percent private training establishment, 12 percent Youth Training course, 7 percent teacher training institute).

Table 9: Students’ intentions in first year after leaving school

Intention (n = 420)	Very likely or likely %	Not sure %	Very unlikely or unlikely %
Attend university	69	12	18
Travel	51	25	24
Earning while learning options	23	30	47
Full-time paid work	22	28	43
A break from study or work	21	37	42
Attend a polytechnic	19	30	51
Attend a private training establishment	16	27	58
Attend a Youth Training course	12	29	59
Volunteer work	9	26	61
Attend teacher training institute	7	14	78
Care for family at home	2	19	78

Note: Columns add to more than 100 percent as students could nominate more than one possible activity.

Students were the least unsure about two particular options but in different ways. Just 12 percent were unsure about whether or not they would attend university, with less than a fifth (18 percent) thinking it was very unlikely or unlikely. However, only 14 percent were unsure about whether or not they would attend a teacher training institute, with more than three-quarters (78 percent) thinking teacher training was very unlikely or unlikely, making teaching appear to be a very unpopular career straight from school. However, this gives a misleading picture of pathway comparisons because the pathway (teacher training institute) leads only to one occupation

(teaching), while the other pathways lead into a range of different and unspecified occupations. It is also more common for teaching to be a post graduate study option.

Just over half of all students expected to travel (51 percent). Less than a quarter expected to be working more than 30 hours a week through earning-while-learning options (23 percent) or paid work (22 percent). Just over a fifth expected to be neither working nor studying; 21 percent expected to have a break from work or study.

Further study

Almost three-quarters of the students in this study expected to undertake some form of tertiary- level study in their first year of leaving school (72 percent) and just 7 percent did not intend any study. If we assume that our students would be 18–19 by the time they enrol in a tertiary institution, the proportion is much higher than the proportion of 18–19-year-olds throughout New Zealand (46 percent) who do enrol in a tertiary institution (Ministry of Education tertiary participation rates for 2006, *Education Counts* www.educationcounts.govt.nz).

Some groups of students were more likely to intend tertiary study than others, and to intend to undertake that study on a full-time basis. More females (77 percent) than males (67 percent), more Pākehā/NZ European/Asian (75 percent) than Māori/Pasifika (50 percent), and more students taking academic courses (86 percent arts, 78 percent science) than students taking non-academic courses (58 percent contextual, 51 percent vocational) expected to undertake tertiary study in the first year of leaving school.

The likelihood of expecting to study also increased as the quartiles and group rankings became more positive for the variables shown in the following table. Although there is a statistically significant difference between student categories for the variable of attendance, the difference is smaller than that for other variables. Given that some students were more interested than others in moving on from school work and routines (see Section 2 on best things and hardest things about leaving school), it may be that students' attendance speaks to a (dis)engagement with school, rather than a (dis)engagement with learning *per se*. Indeed, the analysis of variable and factor associations with intrinsic motivation in *On the Edge of Adulthood* showed that variations in intrinsic motivation and long-term learning attitude are not necessarily related to variations in achievement, as measured by NCEA Level 1 credits, or to subject cluster (Wylie et al., in press).

Table 10: Students undertaking further study

	Lowest quartile or category	Highest quartile or category
	% who said likely or very likely	
Focused and responsible	58	90
Total no. of Level 1 NCEA credits	48	90
Cognitive competency	54	90
Motivation at 14	59	89
Social skills	58	83
Family income at 16	67 (< \$40K)	86 (> \$100K)
Mother's qualifications	55 (none)	85 (university)
Enjoyment of reading	52	82
Social difficulties (reversed)	53	80
Attendance	52	64

The variables in Table 10 above are very similar to those in Table 3 (agreement that the best thing about leaving school is “not having teachers hassling me”). This similarity between tables suggests a possible connection in terms of how students see themselves as learners—the students who feel hassled at school seem less likely to undertake further study.

Few students intended their studies to be part-time (18 percent) and, instead, around a third of students expected their studies to be full-time (36 percent) or were not sure (39 percent). This suggests that part-time study (which may go hand-in-hand with earning-while-learning options such as apprenticeships) is less favoured and/or a less available option for students (Modern Apprenticeship places are limited). It appears that full-time study may still be the preferred, or the default, option for many young people. The slightly higher percentage of students who were not sure (39 percent) might relate to students not knowing how affordable their course costs would or could be, or not actually knowing if they wanted to continue study on a full-time basis after leaving school. Students in the lowest group for motivation at 14 (23 percent) were more likely to undertake study on a part-time basis compared with just 9 percent of those who scored in the highest group for motivation at 14.

Students taking academic courses (57 percent arts and 38 percent science) were more likely to say they would study full-time than students doing non academic courses (29 percent vocational and 27 percent contextual). Other variables associated with students expecting to study full-time are shown in the following table.

Table 11: Students expecting to study full-time

	Lowest quartile or category	Highest quartile or category
	% who said likely or very likely	
Total no. of Level 1 NCEA credits	18	70
Cognitive competency	14	60
Focused and responsible	19	58
Social skills	20	51
Motivation at 14	21	51
Enjoyment of reading	12	49
Mother's qualifications	18 (none)	48 (university)

The previous two tables highlight a social inequality in tertiary participation: not only are young people from the most affluent families more likely to anticipate that they would undertake tertiary study, but they are also more likely to expect to undertake it on a full-time basis. Interestingly, neither table shows any association with school decile, and there is no association with family income at 16 shown in the second table (on full-time study expectations).

Likelihood of intended activities and pathways

There were statistically significant differences associated with Competent Children, Competent Learners factors in terms of intended pathway options for the first year of leaving school. These differences are similar to those found in relation to the previous question on *whether* students intended to study.

University

In the case of *where* students intended to study, students who took academic courses (91 percent arts and 75 percent science) were more likely to attend university than students who took non academic courses (56 percent contextual and 54 percent vocational). Students in the highest quartile for the following variables were also more likely to attend university:

Table 12: Students intending to study at university

	Lowest quartile or category	Highest quartile or category
	% who said likely or very likely	
Focused and responsible	42	90
Total no. of level 1 NCEA credits	33	90
Mother's qualifications	47 (none)	90 (university)
Social skills	47	88
Cognitive competency	36	88
Family income at 16	63 (< \$40K)	88 (> \$150K)
Motivation at 14	61	87
Enjoyment of reading	40	85
Decile of school attended	39 (decile 1/2)	75 (decile 9/10)
Attendance at school	45	74

There are a number of quite dramatic differences between lowest and highest quartiles for the characteristics shown in the table. Two of the social characteristics—decile and mother's qualifications—point to patterns of inequality seen throughout the Competent Children, Competent Learners project and in other research on tertiary participation. Subject clusters in schools may also point to within-school inequalities. It is interesting to note that this is the first time decile has shown up as statistically significant for intended post-school options.

Polytechnic

Study at a polytechnic was not an attractive option for many students in this study; just 19 percent thought it very likely or likely they would attend a polytechnic. The unpopularity of this as an option stood out for students associated with three of the characteristics from Table 12 (students more likely to attend university).

Table 13: Students less likely to attend a polytechnic

	Lowest quartile or category	Highest quartile or category
	% who said unlikely or very unlikely	
Total no. of Level 1 NCEA credits	36	70
Social skills	44	67
Cognitive competency	12	20

Earning-while-learning

Earning-while-learning is paid employment with training towards qualifications paid for, and supported by, the employer. For young people these options typically encompass Modern Apprenticeships, New Zealand Defence Force careers, and industry cadetships. In comparison with full-time tertiary study courses and availability, earning-while-learning options are comparatively fewer and less well publicised. They also tend to be lower in status than other tertiary options, particularly as the most recent option to be recognised as a tertiary-level one, and also since these options are associated with lower status forms of learning involving “hands-on” work and vocational orientations.

Given the association with hands-on learning, usually prevalent in the trades where males predominate, it is not surprising that just over twice as many males (31 percent) as females (15 percent) were likely/very likely to engage with earning-while-learning options. Students doing non academic courses (31 percent contextual and 39 percent vocational) were more likely to engage with earning-while-learning options, compared with students taking academic courses (15 percent arts and 18 percent science).

The pattern of associations seen for the likelihood of attending university is reversed for earning-while-learning as shown in the following table. However, while there is a similar pattern for learning variables, the income-related variables of school decile, mother’s qualifications, and family income at 16 do not appear as might have been expected. This could be because the most common earning-while-learning option is a Modern Apprenticeship and apprenticeship places tend to attract, or be offered to, young people with an existing connection to the trade or industry that suggests they would be a “safe bet” for the employer (e.g., the father is a plumber too, a friend works there, the student has had some work experience there already). In these cases, there would not be an association with income-related characteristics.

Table 14: Students likely to engage with earning-while-learning options

	Lowest quartile or category	Highest quartile or category
	% who said likely or very likely	
Enjoyment of reading	56	13
Attendance at school	48	18
Social difficulties (reversed)	46	15
Focused and responsible	43	10
Cognitive competency	42	8
Motivation at 14	36	14

In addition, students in the highest quartile for social skills (67 percent) were particularly *unlikely* to engage with earning-while-learning options, compared with those in the lowest quartile (32 percent). There was a similar pattern for total number of NCEA credits, with students in the highest quartile (60 percent) particularly *unlikely* to engage with earning-while-learning options, compared with those in the lowest quartile (20 percent).

Full-time paid work

The only gender and ethnicity associations in the initial post-school destinations were that males (29 percent) and Māori/Pasifika students (30 percent) were more likely than females (16 percent) and Pākehā/New Zealand European/Asian students (13 percent) to expect to work full-time in the first year of leaving school.

The pattern of variable associations was very similar to the one for earning-while-learning shown above. However, a key difference is that attendance at school and social difficulties are not associated with students intending to work full-time as they are with students intending to undertake earning-while-learning options. It is not clear why this is the case though.

Table 15: Students intending to work full-time

	Lowest quartile or category	Highest quartile or category
	% who said likely or very likely	
Enjoyment of reading	48	13
Focused and responsible	38	10
Cognitive competency	37	12
Motivation at 14	35	12

Travel

Students in the highest quartile for risky behaviour were more likely to travel. So were students with university-qualified mothers. Females (58 percent) were more likely than males (44 percent) to travel. This is slightly different from the other patterns reported. It may be that students have different reasons for travelling, or different purposes in the kind of travel they expect to do. For some students this might occur *during* study years, and for others *instead* of study.

Care for family, Youth Training course, Volunteer work

Few students intended to pursue these options. However, several of the statistically significant associations point again to structural inequalities.

Students with university-qualified mothers and in the highest quartile for cognitive competency were the most *unlikely* to care for family, or start one, as an option in their first year of leaving school.

The percentage of students who said it was likely/very likely that they would attend a free Youth Training course increased as their school decile decreased. Students from decile 1 or 2 schools were more likely to undertake Youth Training than students from decile 9 and 10 schools. Even though the percentages are low, students in the lowest quartile for cognitive competency were more likely to enrol in a youth training course than those in the highest quartile.

A high percentage of students in the lowest category for enjoyment of reading said they were unlikely/very unlikely to carry out volunteer work in the first year after they leave school compared to just over half of those in the highest category. Given that students who enjoy reading are more likely to study full-time and study at university, they may have more flexibility with their time than those who undertake full-time paid work or earning-while-learning options, making volunteer work more of a possibility.

Combinations of activities and options

Students' certainty about attending university in their first year after leaving school also came through in the patterns of the *combinations* of activities they thought were very likely for them. More than two-thirds of those with a very likely intention to go to university (70 percent), intended it as the *only* option they would take. Only a quarter intending to go to university thought there was another option they were very likely to take.

Just over half of those intending to go to polytechnic (53 percent) or engage in an earning-while-learning option (53 percent) also thought this would be their sole activity. Around half of the students expecting to travel thought they would combine it with one other activity (49 percent) and just over half expecting to work thought they would combine it with another activity (53 percent). Those considering taking a break from study or work were fairly evenly split between whether this would be the only thing (36 percent), or one of two (27 percent), or one of three or more (36 percent) possibilities in the first year of leaving school.

Table 16: Combinations of *very likely* activities

	University	Polytechnic	Earning-while-learning	PTE*	Travel	Work or study break	Full-time paid work
	%	%	%	%	%	%	%
1 option	70	53	53	40	38	36	27
2 options	25	27	23	40	49	27	53
3 or more options	5	20	23	20	14	36	20

* PTE is Private Training Establishment.

Note: Some columns do not add to 100 percent because of rounding.

It is possible that students indicating more than one activity as very likely intend to undertake a combination of activities or options. However, it is also likely that some of the activities they signalled as very likely are back up options to others, reflecting a tendency for young people to apply a kind of reflexive risk management to their post-school activities and career decisions, while factoring in possible disappointments and disruptions (e.g., job loss, under employment), multiple pathway opportunities, and changes of life/career direction (Vaughan, 2005). Some of those intending to go to into tertiary studies may well be considering other ways and means of pursuing their particular career interests, as well as the possibility of missing out on a place in their course of choice.

Reasons for intended activities

The following table shows students' reasons for their very likely or likely intentions in their first year of leaving school. We categorised the reasons in order to show up motivation patterns: pursuing explicit and known interests, exploring new interests, or external drivers or uncertainty.

The activities most linked (more than 20 percent) with explicit interest-based reasons such as studying or following up something of particular interest are attending university or polytechnic, earning-while-learning option, and travelling. The activities most linked with exploration-based reasons, such as keeping specific options open, are attending university or polytechnic, travelling, and taking a break. The activities most linked with external drivers, such as other people's suggestions, are earning-while-learning, full-time paid work, and attending university.

In the case of students expecting to go to university or a polytechnic, interest-based reasons prevail, particularly those associated with pursuing explicit interests. As the reasons become less focused and more externally driven (scanning down the first two columns of the following table), the percentage of students selecting these reasons in relation to university or polytechnic diminishes. An exception is the comparatively high percentage of students reporting that others suggested they go to university (a suggestion from parents for 26 percent; a suggestion from teachers for 17 percent).

Table 17: Reasons given for initial post-school destinations/activities

	University	Polytechnic	Earning-while-learning	Full-time paid work	Travel	Break from study or work
	%	%	%	%	%	%
Pursuing explicit interests						
To gain qualifications to get a job	62	44	31	–	5	–
Can study things did well in at school	54	46	27	–	–	–
To gain new knowledge in interest area	47	37	–	–	–	–
Leads to a specific job I know I want	40	32	36	9	6	–
Always wanted to do this	30	13	18	8	54	–
Exploring interests and options						
To keep specific careers options open	27	22	16	7	8	9
To try things and find out what I want to do	23	15	18	12	29	15
Break from study or work	–	–	–	15	25	48
External drivers and uncertainty						
Parents suggested it	26	15	8	8	7	1
Teachers suggested it	17	13	6	2	1	9
Friends doing it and want to be with them	5	4	1	4	8	2
It's the only option open to me right now	3	4	3	4	<1	2
I don't know what else to do	2	3	2	–	2	3
Starting earning money now	–	–	35	50	11	–
Avoid student loan	–	–	25	32	7	17

Note: Cells with a – indicate items that were not available for students to select as a response.

Around a third of students expecting to do some form of further education or training (40 percent university, 32 percent polytechnic, 36 percent earning-while-learning) thought this would lead to a job they knew they wanted. However, only 9 percent of those expecting to be in full-time work thought it would lead to a job they knew they wanted.

There was a strong sense of a long standing interest or plan for those intending to go to university and/or to travel. Almost a third of the university group (30 percent) and over half of the travel group (54 percent) reported that they had always wanted to pursue their option. The travel group was also interesting in that their reasons

were very concentrated in just a few areas: always wanting to travel; taking a break from study or work; and trying out things to find out what they wanted to do.

The earning-while-learning group responses were spread mainly across the explicit interest-based reasons and the external drivers, and less so across the exploration-based reasons. Students indicated a combination of pursuing particular interests and jobs (31 percent wanted qualifications, 36 percent a specific job, and 27 percent to study things they did well in at school), and financial drivers (35 percent wanted to earn money now, 25 percent wanted to avoid a student loan).

Half of the students who wanted to go into full-time work mainly wanted to start earning money (50 percent) and a third wanted to avoid a student loan (32 percent). These students appeared to be driven by financial, rather than career, imperatives. Very few had reasons related to other people—e.g., parents (8 percent) or teachers (2 percent) suggesting it or friends doing it (4 percent). Very few had always wanted to work (8 percent) or had career-building reasons—e.g., it would lead to a specific desired job (9 percent), to keep specific options open (7 percent), to try things and find what I want to do (12 percent), or did not know what else to do (4 percent). There was, however, a small group that wanted a break from study (15 percent).

The students who wanted a break from study or work not surprisingly gave their main reason as wanting a break (48 percent). Seventeen percent cited avoidance of a student loan and another 15 percent felt it would give them a chance to try things and find out what they wanted to do. Nine percent reported that their teachers made the suggestion of a break—a higher proportion of teachers than those suggesting earning-while-learning, full-time work, or travel—suggesting that some teachers might see a break as more useful for some students.

Understanding intentions

Our data show that some students are more likely to operate with a certain amount of “space” that makes further study, usually university study, and the pursuit of high-level skills, qualifications, and careers more possible. For other students, circumstances seem much tighter and these show up in the variables of mother’s qualifications, school decile, family income at 16, and low quartile scores for cognitive competency and the need to earn money.

The data feed into existing youth transition research and government data that have looked at young people’s transition from school in terms of measurable aspirations to be compared with measurable destinations. Some of these studies and datasets are used by policy makers and policy managers to make predictions about which young people will stick with certain pathways, how reliably certain pathways produce specified destination outcomes, and which young people need the most support choosing and gaining entry study, training, or employment pathways. For example, the Ministry of Education’s ongoing data collections on school leavers and tertiary enrolment and completions show that students who enter university or an institute of technology and polytechnics direct from school are more likely to complete a qualification over a seven-year period than those who enter from the workforce (Ussher, 2006). The Australian Longitudinal Studies of Australian Youth (LSAY) have identified factors that may influence young people outside the labour force and full-time education to return to work or study (Hillman, 2005). The LSAY longitudinal data on young people’s aspirations have shown that intentions to continue with education expressed in junior secondary school are important indications of *actually* continuing in education, and that attitudes to school are more strongly related to educational intentions than any aspects of student background, including socioeconomic background (Khoo & Ainley, 2005). However, our study shows that social advantage is related to positive attitudes to school.

We are also aware that there are assumptions embedded in approaches which seek to track young people or isolate factors, particularly if they take what young people do (course enrolments, qualifications gained, jobs taken up) as a proxy for what it means to the young people and where it might lead. Other research has

challenged the idea of recording only “destinations” or trying to pair up aspirations with destinations. Some researchers have pointed to the “increasingly indeterminate” start and end points of the transition process (Raffe, 2001; Wyn & Dwyer, 1999), the multi directional as well as linear nature of the process (te Riele, 2004), and that it is framed by the changing markers for, and forms of, adulthood (Arnett, 2006)—all things which are not easily measured.

Other researchers have focused on the reasons for pathway or destination choices as a combination of the individual, the contingent, and the structural (e.g., related to the educational institution or course provision) (Hodkinson & Bloomer, 2001). Researchers have also shown that the same post-school studies, training courses, and jobs can play quite different roles in young people’s lives and that young people do not so much follow or enter pathways and careers as “produce” them (Vaughan et al., 2006). There are also problems in the use of destination categories (e.g., not in employment, education or training) for socially excluded young people if there is no appreciation of their frames of reference (Hodkinson & Bloomer, 2001; Watts, 2001; Yates & Payne, 2006).

In other words: we know that our data, and some of the data available through other research, tell us about aspirations and destinations only in the sense of *initial* or *immediate* aspirations and destinations from school. These can be a good guide in predicting trajectories in people’s lives, often because measures can show up patterns of inequality. For example, we can show differences related to socio economic status (family income at 16, mother’s qualifications, school decile) and differences in aspirations related to other variables about their “learning platforms” (cognitive composite competency, attendance, social skills) and learning identities (focused and responsible, motivation at 14, enjoyment of reading).

However, care should still be taken not to misread these patterns of inequality in an overly deterministic way or in a way that forecloses the possibility of measuring, analysing, and understanding changes to those trajectories. While different groups of students have more or less “space” within which to operate and make post-school choices, their trajectories can be altered by what *teachers* do or bring to students’ learning, not just by what students do and bring to the classroom. There is evidence that students enjoy, and are engaged with, certain school subjects more than others but there is also evidence that *any* subject can be made more enjoyable by teaching learning practices that get students to take an active role, and that these practices can positively affect how students see themselves as learners (Wylie et al., in press). Following from this, and from Khoo and Ainley’s (2005) finding that attitudes to school are strongly related to future educational intentions, how students see themselves as school learners is therefore also likely to affect how they see themselves as learners into the future, including in further study and their careers.

Occupations and qualifications

Favoured occupations and qualifications

We asked students to name up to three jobs or careers in which they were interested. We categorised these according to the New Zealand Statistics Standard Classification of Occupations in order to get a sense of the kinds, and levels, of occupations to which students were aspiring. We also asked students to give reasons for their occupational interests. This follows on from research which has shown that young people in the same post-school pathways (courses of study or jobs) may have quite different motivations or identify with the pathway in quite different ways and, conversely, young people engaged in very different pathway options may share similar outlooks (Vaughan et al., 2006). In other words, we did not, for example, want to assume that all students aspiring to professional occupations did so for the same reasons.

We also asked students how many times they expected to study towards a qualification in their lifetime and their reasons if they were expecting to do this more than once. This follows some evidence of workforce development trends showing an increasing demand for qualifications, mobility, and labour market efficiency, and that people may increasingly tend to have more than one career over the course of a lifetime, often necessitating retraining and further education towards qualifications (International Symposium on Career Development and Public Policy, 2006; Organisation for Economic Co-operation and Development (OECD), 2004). We were curious about whether and how this workforce trend extended to students' understandings about qualifications.

Students' most favoured careers/jobs

Students named up to three careers or jobs in which they were interested. Most students identified at least two kinds of career or job that interested them, although 7 percent could not identify any career or job of interest. Of the students who did identify one or more jobs or careers, most indicated an interest in occupations that fell into the "technician and associated professional" category (61 percent) and the professional category (50 percent) under the New Zealand Statistics Occupational Classification.

We have used only the broadest level of the statistical hierarchical categories, as further derivation would render the data too spread to be meaningful. Although the broadest level categories are very general, they do refer to jobs (understood as sets of tasks performed by one person) and skill levels (the range and complexity of the tasks), with the categorisation of skill levels taking into account the amount of formal education and training required to perform the tasks.

Table 18: Categorised occupational aspirations

Occupational category	n = 418	%
Technician and associated professional	255	61
Professional	209	50
Sales/service	109	26
Manager	57	14
Trades	57	14
Labour	25	6
Clerical	13	3
Agriculture and fisheries	10	2
Plant/machine	5	1

Note: Percentages add to more than 100 because students were able to specify up to three occupations.

We asked students to give reasons for their occupational interests via an open question. We coded their answers and show the resulting patterns in the following table. Those students with occupational interests in the professional, technician, agriculture and fisheries, and sales/service categories tended to cite reasons such as “I love it”, “I like doing good”, “I’ve always wanted to”, and “it’s interesting”, which we coded as *personal reward and enjoyment*. Their reasoning suggests intrinsic forms of motivation and engagement, and possibly also a self-awareness about their own dispositions (e.g., people interested in sales/service occupations may have a liking for interactions with other people or “be good with people”).

Students with occupational interests in the manager and clerical categories were particularly likely to cite reasons to do with *external reward and lifestyle*, such as “it’s good money”, “I like meeting people”, “I can succeed”. This may have to do with these occupations tending to be less well designated and known in the general populace. That is, there are managers and clerical jobs in every industry area but a doctor or an accountant is an instantly recognised occupation in a very specific and known industry area which is potentially more likely to attract people interested in the industry area or satisfied by a specific kind of work (e.g., healing people or managing finance). Management and clerical work, on the other hand, may tend to attract people who are looking for particular kinds of job security (promotion opportunities, organisational role) or lifestyle.

The students citing reasons related to the *development and portability of particular skills* were more likely to be interested in occupations in the technician and clerical categories. The few students interested in machine, agriculture and fisheries, and clerical occupations were more likely to cite reasons to do with already having some *experience in the area, having parents encourage it, and finding it easy*.

Students’ reasons for occupational interests are shown in the following table (the highest frequency for reasons for each occupational category is shown in bold).

Table 19: Occupational interests and reasons

Occupational category	Enjoyment, personal reward reasons	Experience, easy, parental approval reasons	Skills development & portability reasons	External reward, lifestyle reasons
	% of occupation choosing reason	% of occupation choosing reason	% of occupation choosing reason	% of occupation choosing reason
Professional	86	2	25	29
Technician and assoc. professionals	82	6	32	38
Manager	54	7	19	67
Sales/service	73	10	17	39
Trades	63	7	19	39
Clerical	46	15	31	62
Agriculture and fisheries	70	20	-	30
Plant/machine	60	40	20	20
Labour	60	8	20	40

Occupational category patterns

Students' interest in professional occupations showed a pattern of association with other variables and factors similar to the pattern for intended university study (see Section 3). The relationship between students' interests and the occupations of family members is explored further in Section 6. The likelihood of interest in professional occupations increased with NCEA credit total, cognitive competency, social skills, focused and responsible group rankings, enjoyment of reading, motivation at the age of 14 years, and mother's qualifications. This trend tended to be reversed for the lowest quartiles or groups, where students were more likely to be interested in trades or service/sales occupations.

Table 20: Students interested in professional occupations

	Lowest quartile or category %	Highest quartile or category %
Total no. of Level 1 NCEA credits	29	80
Cognitive competency	27	71
Motivation at 14	28	68
Social skills	40	67
Focused and responsible	32	66
Mother's qualifications	35 (none)	63 (university)
Enjoyment of reading	32	59

Table 21: Students interested in trades occupations

	Lowest quartile or category %	Highest quartile or category %
Mother's qualifications	40 (none)	16 (university)
Enjoyment of reading	40	4
Social skills	35	3
Total no. of Level 1 NCEA credits	33	0
Focused and responsible	32	14
Cognitive competency	28	5
Motivation at 14	23	8
Attendance at school	27	8

Perhaps not surprisingly given the persistence of gender segregation in trades occupations (Fuller, Beck, & Unwin, 2005; McGregor & Gray, 2003, and see also annual reports on New Zealand industry training and apprenticeships by gender), many more males (24 percent) than females (3 percent) aspired to be tradespersons. More academic (66 percent arts and 52 percent science) than non academic (38 percent vocational and 33 percent contextual) students aspired to be professionals, whereas more non academic students (26 percent contextual and 25 percent vocational) than academic students (9 percent science and 6 percent arts) aspired to become tradespeople. While 51 percent of Pākehā/NZ European/Asian students were interested in professional occupations, only 39 percent of Māori/Pasifika students were interested in these.

A similar trend to that for trades occupations emerged for students interested in service/sales occupations. There were no statistically significant associations for manager occupations.

Table 22: Students interested in service/sales occupations

	Lowest quartile or category %	Highest quartile or category %
Focused and responsible	36	14
Cognitive competency	34	11
Motivation at 14	37	20
Social difficulties (reversed)	32	15

Study towards qualifications over a lifetime

We asked students to give an indication of how many times they expected to study towards qualifications in their lifetime. Half of the students expected to do this just once in their lifetime, but the other half expected to do this two to three times or more. Students' reasons for multiple periods of study or training tended to be about the development and deepening of expertise.

Table 23: Reasons for study towards qualifications more than once

Reason	n = 420	%
Gain more skills and experience in one particular area	191	46
Gain more job opportunities in different areas	164	39
Increase the status of job or position	147	35
Increase earnings	137	33
Keep up with developments in career/job area	137	33
Keep life interesting and promote a broader outlook in life	128	31
To be able to change jobs when want to	101	24
In case of getting hurt at work or losing a job	80	19

Note: Percentages add to more than 100 as students could give more than one reason.

Students in the highest category for enjoyment of reading were more likely than those in the lowest category to think about qualifications in terms of the development of expertise. Those in the highest category for enjoyment of reading (53 percent) were more likely than those in the lowest category (20 percent) to study in order to gain more skills and experience in one career area/job. Students in the highest category for enjoyment of reading (41 percent) were also more likely to study in order to keep up with new developments in one particular career area/job than those in the lowest category (12 percent). Keeping up with new developments was also a more likely reason for students in the highest quartile for cognitive competency (42 percent) than those in the lowest quartile (18 percent).

Overall, the reasons for studying towards qualifications more than once in the lifetime were related more to progression within occupations and careers than to the prospect of developing new careers or linking multiple careers. This theme is discussed and further developed in the following section on students' perspectives on the notion of "career".

Ideas about “career”

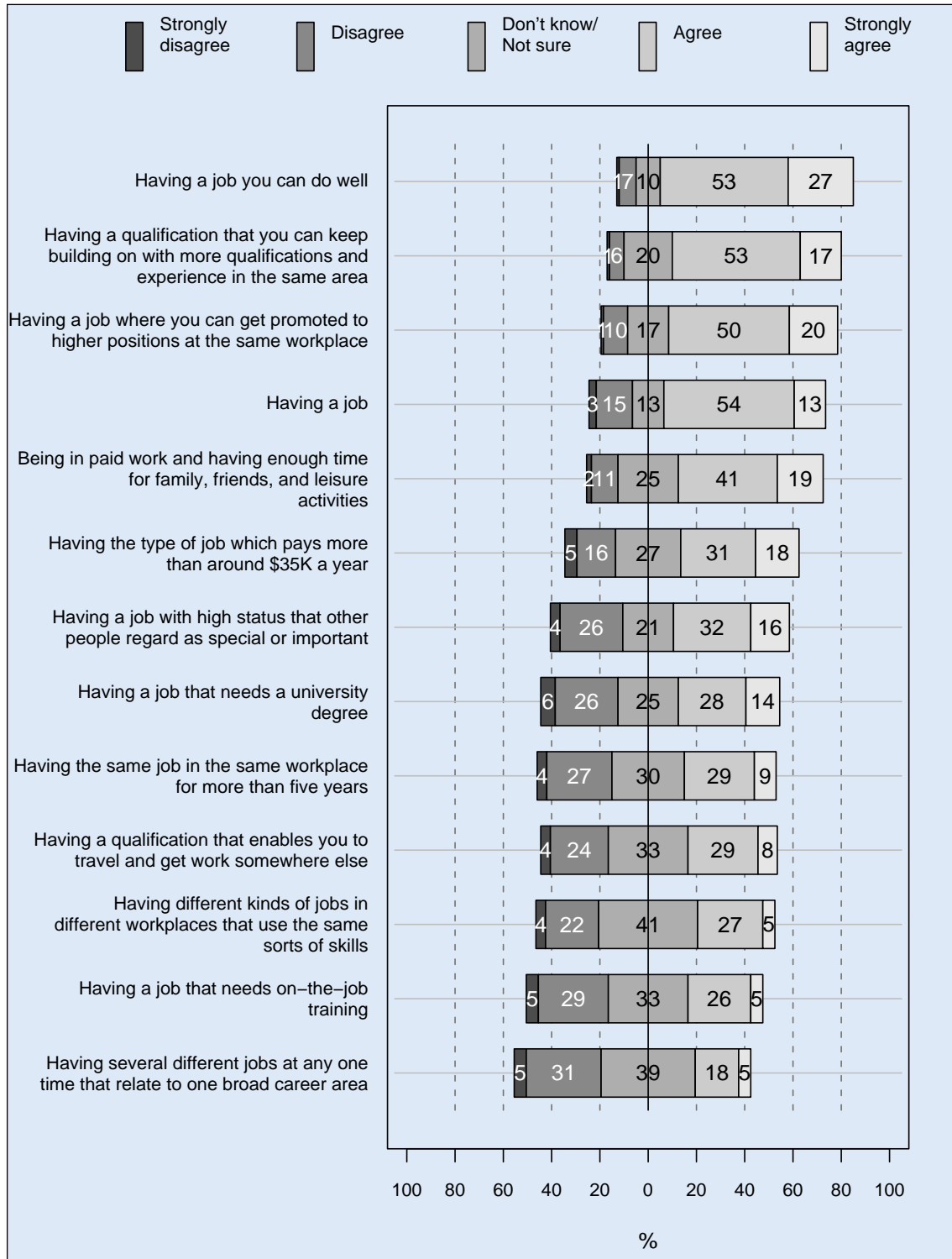
We asked students to indicate a level of agreement with a range of statements about what constitutes a career. We developed the statements from previous work with young people in transition from school and making career decisions (Boyd, with McDowall, & Ferral, 2006; Hipkins, 2005; Vaughan & Kenneally, 2003; Vaughan et al., 2006) and from emergent career development and workforce trends which reference the demands and possibilities of globalisation and knowledge societies. These emergent trends are focused around shifts from lifelong (fixed and hierarchical) *career* to lifelong *learning*, from career as elitist (only some people have careers; others have jobs) to career for all (Watts, 2004), and more recent or recently important concepts such as work-in-life balance, flexible working conditions and contractual arrangements, and skill portability and transferability. We particularly wanted to know whether and how any of these emergent trends were reflected in student perceptions.

What is a career?

In the section on best things and hardest/easiest things about leaving school, we saw that students think establishing a career is different from finding a job, and also something that is harder to do. But what do students actually think a career is? Their responses, given in the following figure, show that 70 percent or more of the students agree or strongly agree with statements that reference the idea of having one job and developing expertise in it:

- having a job you can do well (80 percent);
- having a qualification you can keep building on with more qualifications and experience in the same area (70 percent); and
- having a job where you get promoted within the same workplace (70 percent).

Figure 4: Students' notions of "career"



Generally, percentages are low for strong agreement and strong disagreement with most of the statements. There are some small differences in students' degree of agreement with the statements shown in Figure 4 and these appear to reinforce a distinction between a *career* and a *job* which showed up in students' ideas about what was best and hardest about leaving school (see Section 2). For example, although 67 percent of students were in agreement that a career means "having a job" and just 18 percent are in disagreement with that, only 13 percent could *strongly* agree with this, suggesting that a job was certainly part of a career but not the entirety of it. Put another way: students may recognise that having a job is a necessary, but not sufficient, condition for having a career.

A similar, fairly small proportion of students were able to strongly agree with ideas more specific than simply "having a job":

- being in paid work with enough time for leisure, family, friends (19 percent);
- having the type of job which pays more than \$35K (18 percent);
- having a job with high status (16 percent); and
- having a job that requires a university degree (14 percent).

However, many of the statements with which students were able to strongly agree are linked with traditional status-related ideas about career—as requiring university qualifications, as involving a high salary, or the high esteem of others. Other statements linked to emergent career ideas of flexibility and earning-while-learning tended to draw more uncertainty or disagreement from students. But, overall, 70 percent or more students agreed or strongly agreed with statements linked to traditional ideas—having a job you can do well, having a qualification you can keep building on with more qualifications and experience in the same area, and having a job where you get promoted within the same workplace.

On-the-job training

The statement that a career was "a job that requires on-the-job training" drew an almost even split between those who agreed, disagreed, and were unsure, making it one of the statements with which the fewest students could agree. Students' responses to statements tended to focus on career in its elitist sense (a career rather than a job) and in terms of markers of status (salary, esteem, university qualifications). It is perhaps not surprising that on-the-job training was seen as less relevant to the idea of "career" given that it is generally associated with non-professional jobs or occupations with lower status, involving lesser regarded forms of learning (hands-on and vocational), and low or no recognised achievement in school (through qualifications or credits). While professional occupations—more closely associated with "career" than "job"—also often have a training component, the training is usually understood to be "professional development", is awarded through professional bodies or tertiary institutions, and does not suffer from the same lack of status as "on-the-job training".

Those students more likely to *agree* that having a job with on-the-job training constituted a career, were in the lowest quartile for cognitive competency (44 percent), as opposed to the highest (22 percent). Not surprisingly, about half of the students who aspired to be tradespersons (52 percent) agreed with this characteristic of a career.

Students more likely to *disagree* that a career is a job needing on-the-job training showed a similar profile to those aspiring to university study. The variables are shown in the following table:

Table 24: Disagreement that on-the-job training constitutes “career”

	Lowest quartile or category	Highest quartile or category
	% who disagreed or strongly disagreed	
Focused and responsible	28	43
Social skills	28	49
Social difficulties (reversed)	17	40

Skills portability and status

Students in the lowest quartiles for focused and responsible (48 percent) and cognitive competency (42 percent) were more likely than students in the highest quartiles (34 percent, 27 percent) to agree that a career was having a qualification that allowed you to travel and get work somewhere else. This may be a reference to trades qualifications and skills which have a reputation for being “portable” and in demand in other countries.

Students from decile 1 and 2 schools (78 percent) were more likely than students from schools of all other deciles schools (48 percent) to agree that a career was having a job with high status. Students in the lowest quartile (61 percent) for cognitive competency were also more likely to agree with career being a job with high status than those in the highest quartile (38 percent).

Not surprisingly, students who aspired to be professionals (47 percent) were more likely to agree that a career was having a job that needs a university degree.

Traditional and emergent conceptions of career

The following table shows the 13 statements broken into two groups, each associated with traditional or emergent views of career.

Table 25: Views of career

Statements provided to students		Agreement %	Disagreement %	Unsure %
Traditional view of career	A job you can do well	80	17	10
	A job where you get promoted to higher positions at the same workplace	70	16	20
	A job	67	18	15
	The type of job which pays more than \$35K a year	49	21	27
	A job with high status that other people regard as special or important	48	30	21
	A job that needs a university degree	42	32	25
	The same job in the same workplace for more than five years	38	31	30
	A job that needs on-the-job training	31	34	33
Emergent view of career	A qualification that you can keep building on with more qualifications and experience in the same area	70	16	20
	Being in paid work and having enough time for family, friends, and leisure activities	60	13	25
	A qualification that enables you to travel and get work somewhere else	37	28	33
	Different kinds of jobs in different workplaces that use the same sorts of skills	32	26	41
	Several different jobs at any one time that relate to one broad career area	23	36	39

It is perhaps fitting that student responses tend to show more uncertainty about the more recent and uncertain looking (emergent) career ideas—ideas which are themselves addressing future uncertainty at the level of the individual (e.g., career portfolio construction and adaptability), the workplace (e.g., outsourcing and global competition, new skill demands), and society and economy (e.g., technology-driven changes, demands for constant innovation, and equity considerations). It is not surprising that students in our sample seem to be responding this way. They are likely to be experiencing the sort of school-based careers guidance that tends to be ad hoc overall and privileges the provision of information about jobs over the development of self-management and career management skills, therefore often failing to equip school leavers with the skills they need beyond *entry* to a course of study or the labour market (Vaughan, 2007; Vaughan & Gardiner, 2007).

However, despite a lack of solid agreement with (or perhaps understanding of) emergent views of career, students do show a fairly high level of agreement with two of the career ideas suggesting the active involvement of the individual, firstly in “producing” a career in relation to the individual’s different identities and whole-life portfolio (Vaughan et al., 2006)—for example, qualifications you keep building on with more qualifications and being in paid work with enough time for family, friends, and leisure activities. Other research has also shown

that some young people who have already left school are thinking of themselves as an ongoing enterprise and linking disparate qualifications and jobs in creative ways (Vaughan et al., 2006). And in the previous section on Occupations and qualifications, we saw that more than half of the students expected to study towards qualifications more than once in their lifetime.

However, care is needed in understanding this pattern because students' reasons for studying towards qualifications more than once tended to be about developing skills and expertise in one area—suggesting a continued attachment to more traditional ideas of career, at least in some respects. It may simply be that there is not yet consistency across young people's school-based careers education experiences (as well as their broader learning experiences at school) and emergent trends of *career development*. This idea addresses people as they make education, training, and occupational choices throughout life (rather than only as they leave school) and in terms of people *managing*—or actively constructing—their careers (International Symposium on Career Development and Public Policy, 2006) but is clearly not yet an idea that is widely understood or possible for all people.

Students' agreement (60 percent) with “being in paid work and having enough time for family, friends, and leisure activities” does suggest a fairly high level of interest in work-in-life balance—one of the key emergent career ideas. Some New Zealand agencies continue to refer to the binary of “work-life balance” (e.g., Equal Employment Opportunity Trust, Department of Labour). However, Career Services, the organisation which leads New Zealand's provision of careers information, advice and guidance, and decision making leading to better quality work and life choices, has signalled a move to the term “work-in-life balance” (Career Services, 2006, 2007b) in explicit recognition that “work” and “life” can be integrated, rather than sit in opposition to, or tension with, each other. This follows existing New Zealand youth transition research which showed some school leavers taking an integrated approach to “work”, “career”, and “life”, although the ways they do this vary (Vaughan et al., 2006) and it is not clear whether and how it may be linked to nascent trends in “downshifting”, anti-consumerism, sustainable living, and the “slow” movements.

Career connections

What is most connected with your most favoured career?

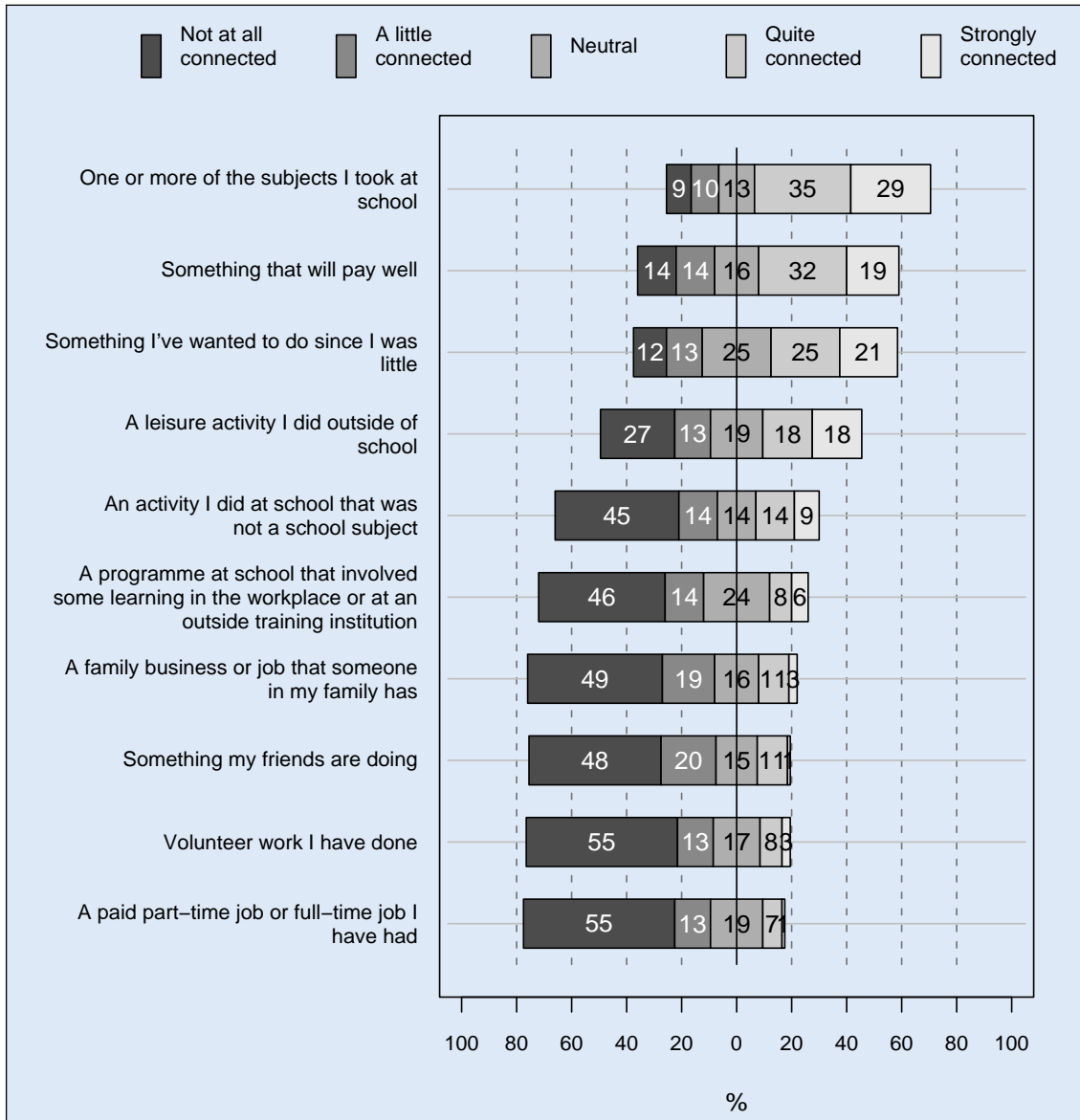
We asked students to consider their most favoured occupation and how connected it might be to a range of statements about other school or work activities and experiences. This is slightly different from asking students about perceived *influences* on their careers thinking; we explore that in the following section. We asked about *connections* as a way to get at students' perceptions of the links between their particular favoured career aspiration and its relationship with other ideas, people, experiences, and outcomes.

Most of the question items were *not* seen as connected to their most favoured occupation by the majority of students. In fact there were really only three or four items where more than a third of students indicated a connection and these tend to be related to leisure pursuits and longstanding interests such as “a leisure activity I did outside of school” and “something I've wanted to do since I was little” or school-related activities such as “one or more subjects I took at school”.

Other experiences which might more obviously familiarise students with particular careers more directly (for example, paid work or family occupational links) were generally not seen as connected to career interests. It is still possible these potential connections did familiarise students with particular careers, but they may have achieved this in a way that might have eliminated those careers as possibilities—a strategy sometimes employed by students seeking to filter and organise the many possibilities through school-based career “tasters” (Vaughan & Kenneally, 2003).

Students did indicate fairly strong connections between their most favoured occupation and “something that pays well”. However, this is likely to be a result of students' interest in careers in the professional and technical occupational categories (see Section 3) which tend to have higher salaries anyway. It is also unlikely that this connection is actually a *reason* for students' interest in those careers; only 17 percent of the students interested in professional careers and 13 percent of the students interested in technician careers cited earning good money as a reason for their interest. Instead, over 80 percent cited reasons related to personal reward and enjoyment (see Section 3) which suggests that while students expect they will do something that does pay well, this is an incidental connection rather than a motivating connection.

Figure 5: Experiences and ideas connected with students' most favoured career aspirations



Connections to occupational categories

The students most likely to say that what they learnt in their “school subjects” was strongly connected with their chosen occupations were those most interested in a career in the professional (38 percent), managerial (35 percent), and agriculture and fisheries occupational categories (33 percent). Students with a favoured career interest in the sales/service and clerical occupational categories were least likely to cite a strong connection to school subjects. This suggests that school may not be helping all students to make connections to all kinds of occupations.

Despite a lack of connection with their school subjects, students interested in a career in the sales/service category were the most likely to cite a strong connection to “something I have wanted to do since I was little” (59 percent). There were also some strong connections here for students interested in careers in the managerial (28 percent), professional (22 percent), and technician categories (20 percent), although less so than for sales/service.

Connections to “something that pays well” were more likely to be cited by students interested in managerial (30 percent) and professional occupations (21 percent). On the other hand, students interested in agriculture and fisheries (33 percent) and technician occupations (31 percent) had strong connections to “a leisure or interest activity I did outside of school”, again suggesting that school is not a major connector for students interested in these occupations.

Connections with school-based experiences

The following two tables show a similar pattern where students scoring in the highest quartile or grouping are more likely to connect their favoured career with school subjects and less likely to connect it with school-based workplace learning. It is very likely that students in the highest quartile for these factors have not experienced school-based workplace learning programmes. This in turn reinforces a tendency for a lack of connection in schools between conventional and academic school subjects and vocational subjects and workplace learning. In most cases these are run as distinct streams.

Table 26: Connections between career choice and subjects taken at school

	Lowest quartile or category	Highest quartile or category
	% who said connected or very connected	
Focused and responsible	58	82
Social skills	57	77
Cognitive competency	52	75

Table 27: No connection between career choice and school programme with workplace learning

	Lowest quartile or category	Highest quartile or category
	% who said not connected or not at all connected	
Focused and responsible	45	73
Enjoyment of reading	44	76

Males (56 percent) were slightly less likely than females (66 percent) to see little or no connection between career choice and school programme with workplace learning. Strong connections to workplace learning tended to decrease according to quartile in relation to cognitive competency: from 19 percent in the lowest quartile down to just 4 percent in the highest quartile.

Students in the highest quartile (26 percent) for cognitive competency were more likely than those in the lowest quartile (18 percent) to see a strong connection to “an activity I did at school that was not a school subject”. However, overall numbers for a strong connection to “an activity I did at school that was not a school subject” were very low and there were no other variable associations—possibly because students have comparatively less exposure to school activities which are *not* school subjects or that very few students engage with those activities which tend to be aimed at very selective groups of students (e.g., top performers or those with specialist interests) or at-risk students.

Connections with experiences outside school

Strong connections to *paid work* were less frequently cited; only 8 percent of students saw a connection at all. However, the overall pattern of associations with variables is the converse of the pattern for strong connections with *school-based* experiences. Students in the lowest quartile for cognitive competency (20 percent) and social difficulties (reversed) (21 percent) were more likely to see a strong connection to paid work than those in the highest quartiles (4 percent, and 3 percent). Students taking non academic courses (18 percent contextual and 13 percent vocational) were more likely than those taking academic courses (5 percent arts and 6 percent science) to see a strong connection. It is possible that students find it hard to see themselves in options beyond those they already know.

Students in the highest quartile for enjoyment of reading (82 percent) were more likely to see *no connection* to paid work than those in the lowest quartile (40 percent). Females (76 percent) were slightly more likely than males (63 percent) to see *no connection* to paid work (perhaps because there is no particular connection, depending on the kind of work done).

Just 14 percent of students saw a connection to a “family business or a job that someone in my family has” and just over two-thirds (68 percent) saw little or no connection, making this an unlikely career connection for most students. However, students in the highest quartile for social skills were more likely than those in the lowest quartile to see a connection here, and males were more likely to see a connection than females.

Finally, although possible career connections to “something that pays well” need to be read carefully (see previous sub section), males (65 percent) were more likely than females (40 percent) to see a connection here. Again this may or may not necessarily be a motivational connection; however, it may be that males feel more societal pressure to earn money or have a job that pays well.

Although some connections may only be perceived retrospectively or may be perceived as connections now but loosen their grip over time (students may perceive things differently with more distance), it seems that the statistical associations show up differences in the kinds of connections to career for students associated with different variables. School is connected to career possibilities and ideas for students who are doing well at school; these variables also show up for students intending to study at university and with an interest in professional occupations. Non school activities and interests are connected for students not doing so well at school; these variables also show up for students intending to work full-time or pursue earning-while-learning options and non professional occupations.

Most useful activities

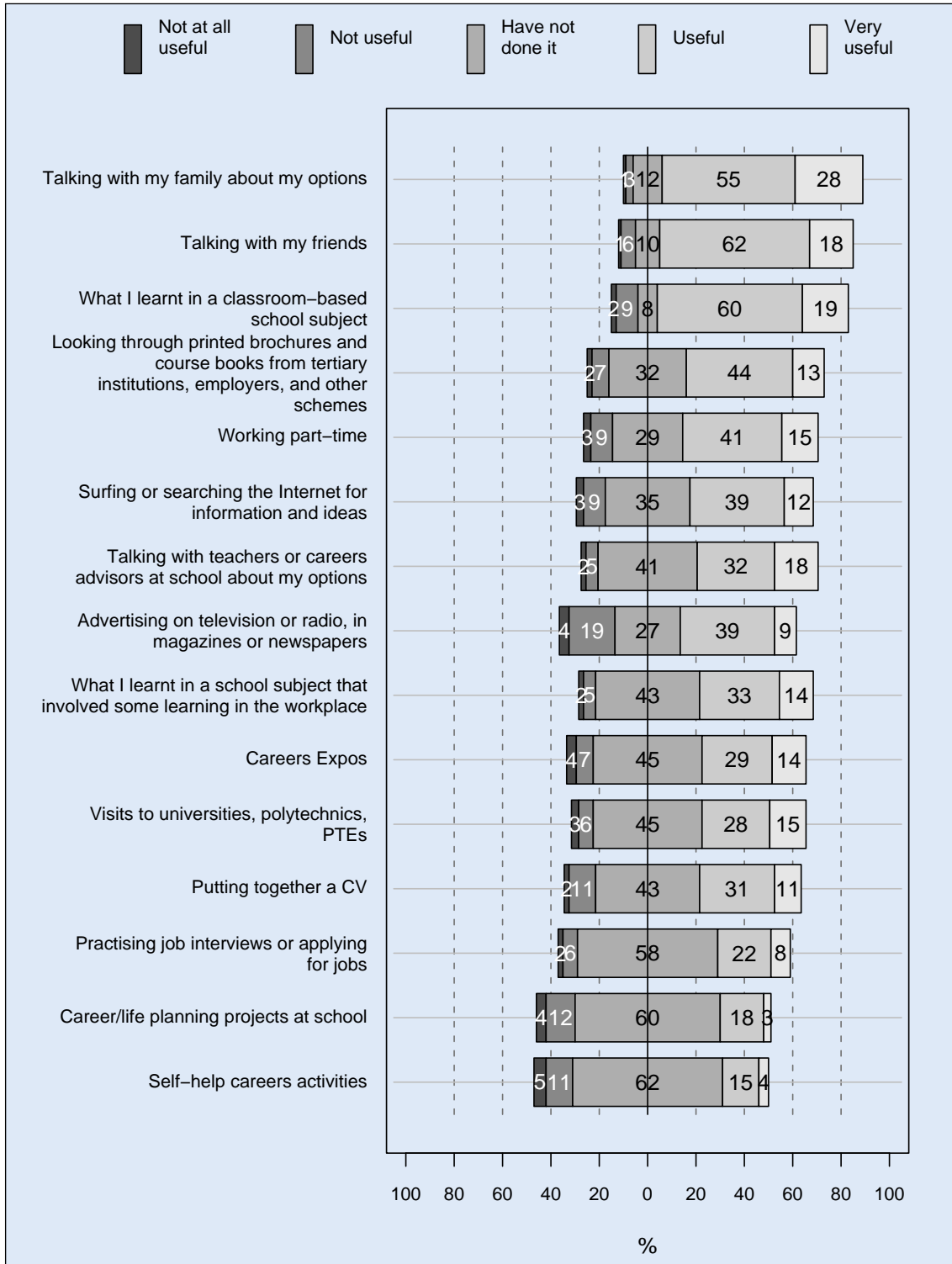
The previous section looked at students' perceived *connections* with favoured careers. This section looks at *connectors* or perceived influences in the form of most useful activities for thinking about careers and pathways from school (i.e., exploration of possibilities, information gathering and processing, decision making). We again provided students with a list of statements about different activities and events. The statements were based on existing research findings on the influences on young people's career decision making, including informal guidance, formal school-based careers education and non careers learning, and learning opportunities outside of the school (Boyd, Chalmers, & Kumekawa, 2001; Career Services, 2003; Hipkins, 2005).

Most useful activities for students thinking about career

The following figure shows student responses to the statements. Only a very small proportion of students thought any of the activities were not useful or not useful at all (average non usefulness response of around 10 percent). Instead, the majority of student responses highlight two things. Firstly most of the activities were useful, but not *very* useful. Secondly a sizeable proportion of the students had not actually taken part in most of the listed activities; around a third of the students reported not doing more than two-thirds of the activities.

The few activities that were considered *very* useful by more than a few students were "talking with friends" (18 percent), "talking with teachers or careers advisors at school about my options" (18 percent), "what I learnt in a classroom-based school subject" (19 percent), and—the standout—"talking with family about my options" (28 percent).

Figure 6: Student perceptions of useful support for career decision making



Family influence

Students' perception that their family is key to their thinking about careers is not surprising. Although there is little in-depth New Zealand research into family and careers, we already know that family is an important influence through a number of New Zealand studies that have collected data which compares the different sources of young people's guidance or decision making influences and shows that family consistently ranks at the top of the list, far ahead of school careers advisors, in the eyes of young people (Boyd et al., 2001; Career Services, 2003; Dupois, Inkson, & McLaren, 2005; Hipkins et al., 2006; McLaren, 2003). New Zealand research has also shown how family support can be contingent and differently enabling or constraining for young people (Vaughan et al., 2006) but also that many parents feel inadequate to the task of supporting the career decision making process (Career Services, 2007a).

International studies of the career decision making context also confirm the enormous influence of family on young people's career decision making (Bryce, Anderson, Frigo, & Mckenzie, 2007). Some suggest enhancing the influence of family by including and supporting the family in relation to the young person's decision making (Berríos-Allison, 2005; Perkins & Peterson, 2005). Several studies that have measured relationships between family support and career decision making (Nota, Ferrari, Solberg, & Soresi, 2007) and family encouragement and discouragement of certain occupational interests (Berríos-Allison, 2005), have a view to the possibilities of interventions that might effect greater career self-efficacy for the individual student or young person.

Our data give a more nuanced view of family influence (usefulness) which may be helpful in determining support interventions. As with previous associations, the students who scored highly for behaviours valued in school (as well as elsewhere), such as motivation and enjoyment of reading, who had highly qualified mothers, and a lower measure of social difficulties and risky behaviour, were more likely to find their families helpful to them in their careers thinking. However, the differences between lowest and highest quartiles and categories are not huge; even students scoring in the lowest quartiles and categories found their families to be useful support.

Table 28: Talking with family is a useful career support

	Lowest quartile or category	Highest quartile or category
	% who found it useful or very useful	
Mother's qualifications	84 (none)	96 (university)
Focused and responsible	72	93
Enjoyment of reading	72	92
Social difficulties (reversed)	78	91
Motivation at 14	77	90
Risky behaviour (reversed)	68	88

Perhaps what is especially interesting is what students might be indicating about the *kind* of usefulness they see in family relationships. In the previous section on career connections (Section 7), many students did not connect their career interests and a "family business or job that someone in my family has". Yet read against this section's data on the family, there might seem to be an inconsistency: on the one hand family is not seen as connected to favoured careers but on the other hand family is an important influence and resource on careers thinking. These two positions can actually be understood in terms of the opportunity and responsibility paradox facing students today.

Generally speaking, families no longer necessarily set the parameters of students' career choices in an *overt* sense, by insisting young people follow in the occupational footsteps of others before them in the family or stay away from certain occupational (and life) choices that are not highly valued or are thought to bring shame upon the family in some way (e.g., males from conservative families becoming nurses). Modern careers thinking and workforce development places the emphasis on *choice* and on *individual* (rather than family or community) choice.

However, families do undoubtedly encourage and discourage young people in other ways, through their values, knowledge, and networks. The key part of this, though, is that students may be seeing family, not simply as an information resource or guiding force in the strict sense, but as a place to (openly or otherwise) help make sense of various and ever-increasing or changing opportunities for the individual student's life. Even with a renewed emphasis on school-based careers education, the burgeoning of options (school subjects, assessment options, tertiary institutions, new careers, workplace learning) may make the support of families (and other relationships) more important, not less so. It is therefore not so surprising that the most useful activities cited by students tended to be relationship-based or actively involve students in thinking about their lives or having experiences that help to construct a real sense of options: in addition to "talking with my family", student responses highlighted in particular the usefulness of "talking with my friends", "what I learnt in a classroom-based school subject", "working part-time", and "talking with teachers or careers advisors".

There might also be a sense in which students are prey to what Furlong and Cartmel (1997) refer to as the "epistemological fallacy" of the dominant individualistic career decision making narrative. This is where structural constraints (such as socio economic status, gender, or family networks) are not recognised as such by the individuals concerned or society. That students recognise their family as the most important influence but do not cite their family as connected with their careers thinking could be part of not recognising the structured-ness of our choices, within a society that celebrates how unfettered our options are (supposed to be). The data in this report have certainly shown up patterns consistent with structural constraints and freedoms through the statistical associations with social variables such as family income and mother's qualifications, and school characteristics such as subject cluster and decile. These patterns are summarised in Section 9.

Useful types of activities

The following table again shows students' responses to the statements about useful activities for career thinking, but this time grouped according to the chief aspect of the activity: relationship-based, information gathering, active planning, or experiential.

Table 29: Useful activities

Statements		Useful	Not useful	Have not done it
		%	%	%
Relationship-based	Talking with my family about my options	83	4	12
	Talking with my friends	80	7	10
	Talking with teachers or careers advisors at school about my options	50	7	41
Information gathering	Looking through printed brochures and course books from tertiary institutions, employers, and other schemes	57	9	32
	Surfing or searching the Internet for information and ideas	51	12	35
	Advertising on television or radio, in magazines or newspapers	48	23	27
	Careers expos	43	11	45
	Visits to universities, polytechnics, PTEs	43	9	45
Active planning	Putting together a CV	42	13	43
	Practising job interviews or applying for jobs	30	8	58
	Career/life planning projects at school	21	8	58
	Self-help careers activities	19	16	62
Experiential	What I learnt in a classroom-based school subject	79	11	8
	Working part-time	56	12	29
	What I learnt in a school subject that involved some workplace learning	47	7	43

When viewed this way, it is clear that where students have had exposure to, or taken part in, specific career planning activities, they have generally found them useful. However, there are some interesting trends in relation to the kinds of activities students have experienced. For example, nearly half of the students were unable to evaluate (as useful or not) because of non participation: *talking with teachers or careers advisors*, *visiting tertiary settings* and *careers expos*, and *carrying out careers/life planning projects*. Students' non participation in such activities is disturbing given that the sample comprised senior secondary students (158 Year 11 students and 260 Year 12 students in 2005⁶) at the minimum school leaving age of 16 and that schools are mandated through National Administration Guideline 1.6 to provide appropriate career education and guidance for all students in Year 7 and above, with a particular emphasis on specific career guidance for students at risk of leaving school unprepared for the transition to the workplace or further education/training (Ministry of Education, 2007a).

Students' reported non participation can be understood as a reflection of the characteristics of our sample (i.e., an over-representation of more privileged students) as well as the findings from a recent survey of careers

⁶ There were no year-level data for two students.

education in New Zealand schools (Vaughan & Gardiner, 2007). The careers education survey used similar statements to our “useful supports for career decision making” question. The survey findings show that school careers staff generally consider these same useful support activities to be “vital/very important” and that they are “scheduled annually or more often” by most careers staff.

Yet the careers staff responding to that survey reported that most or all Years 11 and 12 students participate in these activities just 22–38 percent of the time (Year 11) and 36–52 percent of the time (Year 12). Participation rates rise significantly when target groups are in keeping with the National Administration Guideline 1.6 emphasis on careers education for at-risk young people. Careers activities therefore tend to be targeted at groups of students who are less likely to be in our Competent Children, Competent Learners sample (i.e., Māori and Pacific students, early school leavers⁷ and truant students).

This type of selective provision makes careers education activities more about intervention than something for all students that is integral to being in, and preparing to leave, secondary school. It is consistent with National Administration Guidelines 1.6 but seems inconsistent with the Ministry of Education’s school support publication *Career Education and Guidance in New Zealand Schools* (2003, p. 7) which spells out the aims of career education and guidance in terms of students developing self-awareness about opportunities and for making decisions (Vaughan & Gardiner, 2007). It looks even more inconsistent with career development trends which emphasise careers guidance for everyone and in a lifelong sense, not just at the point of leaving school (Vaughan, 2007).

Given the demographic slant toward students from more affluent and advantaged backgrounds in our sample, the career interests or aspirations of most of our students were *unlikely* to have been mediated by school careers guidance. Instead their career interests are more likely to have been mediated by school experiences and family background and support—which is what their responses show. On the other hand the less well represented students in our sample were statistically more likely to experience some aspects of school as a useful mediation for careers thinking. The majority of Māori/Pasifika students (70 percent), but less than half of the Pākehā/NZ European/Asian students (47 percent), reported that “talking with teachers or careers advisors at school about their options” was useful/very useful to them in thinking about what to do when they leave school.

Students for whom formal school-based careers activities were to be a useful mediation showed patterns of associations very similar to the patterns seen elsewhere in this report, particularly those in Section 7 on career connections. The more closely students were associated with variables related to school success, the more likely they were to find their school learning useful for thinking about post-school pathways and careers.

⁷ The 27 students who had already left school are not included in this analysis. A section on those students is included in the companion report *On the Edge of Adulthood* (Wylie et al., in press).

Table 30: Learning about careers in a classroom-based school subject

	Lowest quartile or category	Highest quartile or category
	% who found it useful or very useful	
Total no. of Level 1 NCEA credits	60	95
Focused and responsible	64	92
Social skills	65	89
Enjoyment of reading	56	86
Attendance	59	85
Risky behaviour (reversed)	62	76

Students who found vocational school programmes or paid part-time work useful were more likely to be in the lowest quartile for some school success variables. Motivation at 14 did not fit this pattern; students in the *highest* quartile were more likely to find school–workplace programmes useful. There is some evidence that schools select more highly motivated students for these programmes, the most common of which is Gateway or STAR-funded courses. Reasons for this include the Gateway student eligibility criteria of being “work ready” (Tertiary Education Commission, 2008), and giving the limited programme places to students who teachers believe will get the most out of the programme and not damage the school’s relationship with the employer by “wasting” the employer’s time or creating extra pastoral pressure for the employer (Tertiary Education Commission, 2003; Vaughan & Kenneally, 2003).

Table 31: Learning in school–workplace programme or school “work experience”

	Lowest quartile or category	Highest quartile or category
	% who found it useful or very useful	
Mother’s qualifications	61 (none)	35 (university)
Cognitive competency	59	31
Total no. of Level 1 NCEA credits	53	25
Motivation at 14	42	52

Table 32: Learning about careers from paid work (part-time)

	Lowest quartile or category	Highest quartile or category
	% who found it useful or very useful	
Cognitive competency	78	44
Risky behaviour (reversed)	71	42
Focused and responsible	67	40

A similar pattern emerges in relation to some school-based careers education activities. As the next table shows, these are most typically associated with students who will not be attending a tertiary institution and/or intend to

move from school to full-time work. This points again to the provision of careers support being targeted at particular students rather than across-the-board for all students.

Table 33: Learning about careers through careers-specific activities

	Activity	Lowest quartile or category	Highest quartile or category
		% who found this useful or very useful	
Mother's qualifications	Putting together a CV	53	27
	Putting together a CV	59	35
Cognitive competency	Career/life planning projects at school	33	14
	Practising for job interviews or applying for jobs	51	20
Total no. of Level 1 NCEA credits	Practising for job interviews or applying for jobs	48	20

It is important to note that while the activities of “putting together a CV” and “practising for job interviews or applying for jobs” usually occur through school careers programmes, it is possible that students might do this with friends or family instead (or as well). However, the greater likelihood is that these do occur through school; recent research indicates that school-based careers advisors regard these activities as vital or important, if not necessarily working with students on them very frequently but often on an as-needed basis (Vaughan & Gardiner, 2007).

Overall, our data point to wide variation between what students find useful and what they have actually done or been exposed to, as well as the prime usefulness of using relationships—between student and family, student and friends, and student and school subjects—to help with thinking about careers. Our data cannot necessarily point to the way in which various activities are useful and it is worth remembering that different students will find different activities more or less useful, and find them more or less useful at different points in time, or in relation to different events. For example, students can find some learning experiences useful as confirmation of their existing interests or aspirations. But they may equally find them useful as a *dis*confirmation, particularly if the interest or experience was an exploratory one (Vaughan & Kenneally, 2003). However, overall, careers education activities are a deliberate intervention targeted at particular students and may well make assumptions about what sort of student it is that needs help, as well as what sort of help is needed (Vaughan & Gardiner, 2007).

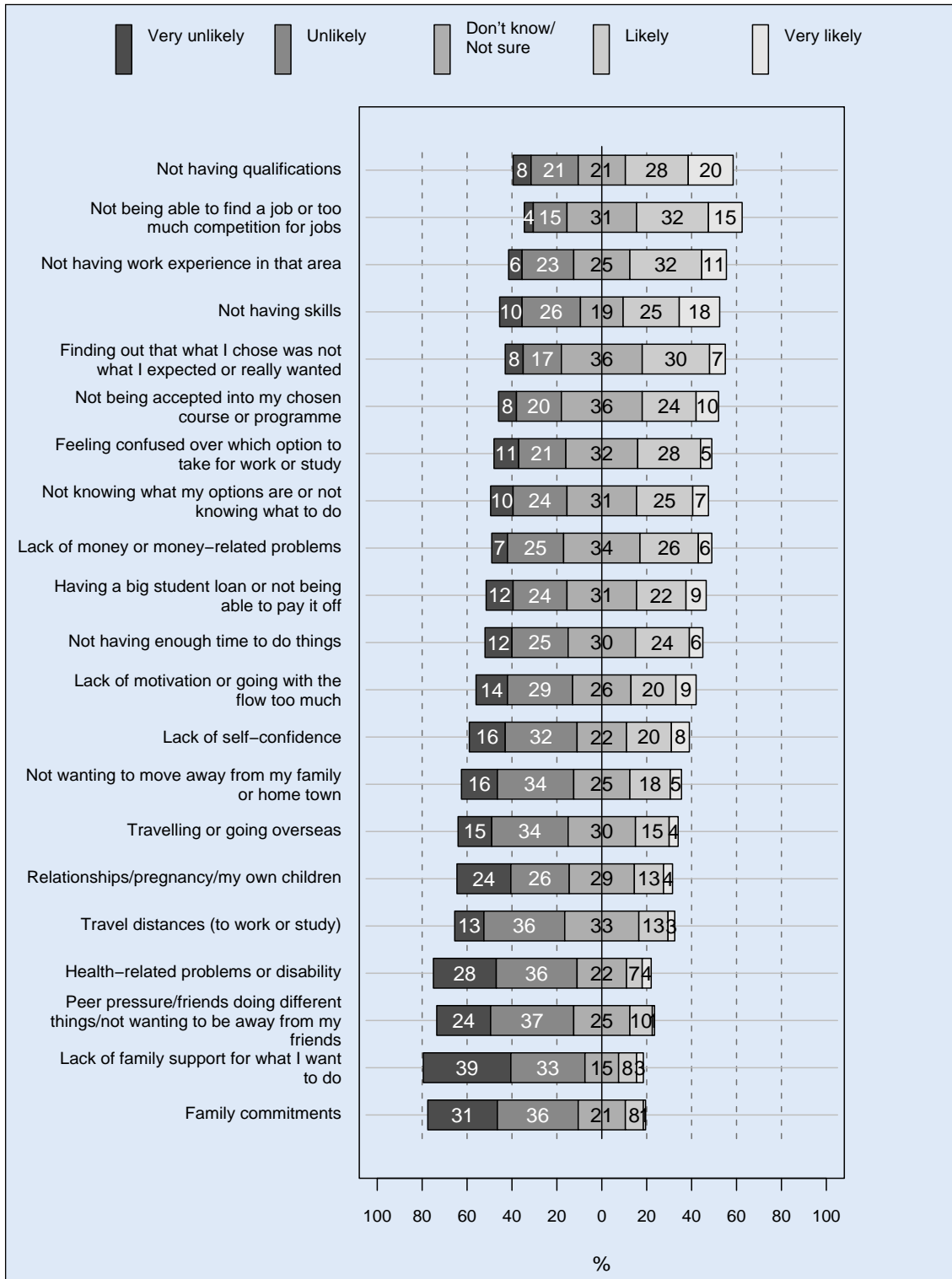
The life you want

We asked students to respond to a series of statements about what might stop them having the life they want. The statements were based on existing careers and transition research and interactions with young people which have highlighted the kinds of barriers faced and perceived by young people preceding and during the transition from school (Boyd, McDowall, & Cooper, 2002; Vaughan, 2005; Vaughan & Boyd, 2004; Wyn & Dwyer, 1999).

Although we have a specific focus on careers and the transition from school for this report, we couched this question in terms of “life” rather than “career”. We did this because research has shown that young people think about career within the context of life more broadly (lifestyle, living arrangements, relationships) and identity, where work is *not* necessarily the major component (Vaughan et al., 2006) and that transition is not necessarily linear (learning then employment) despite policy assumptions to that effect (Dwyer, Smith, Tyler, & Wyn, 2003; te Riele, 2004). Therefore our statements are about study and training, employment, and skills and qualifications, but they are also about knowledge of options, knowledge of self (motivation, self-confidence, confusion, changes of heart), lifestyle (time, travel), personal circumstance (physical health, financial standing, geographical locations), and relationships (family, friendships, parenting).

Many of the statements refer to topics covered in previous questions, allowing us to make some comparisons for the purposes of analysis. For example, we asked students about finding a job through the statements about the best things about leaving school, the hardest/easiest things about leaving school, what a career is, as well as in this question about barriers to a desired life.

Figure 7: What might stop you having the life you want?



Few students thought any of the barriers were *very likely*, although students picked out “not having qualifications” (20 percent) and “not having skills” (18 percent) over the other *very likely* possibilities.

Generally, most students did not see significant barriers. Less than half cited any of the barriers as likely or very likely. Less than a third thought there was any likelihood for over two-thirds of the listed barriers. However, all of the barriers seen as likely or very likely by more than a third of students were directly about careers and pathways—not surprising given that these were also the sorts of things thought to be hardest in leaving school (and creating the most transition anxiety).

Students showed the most concern over “not having qualifications” (48 percent likelihood) and “not being able to find a job or too much competition for jobs” (49 percent likelihood).

The concern over what might happen in life without qualifications is most likely to reflect the esteem of qualifications as essential in today's labour market, particularly for the technician and associated professional and professional occupational categories to which most students reported aspiring. Given that almost three-quarters of students expected to undertake some form of tertiary-level study in their first year of leaving school (72 percent) and just 7 percent did not intend any study, in keeping with their professional aspirations, it is not surprising that students picked out a lack of qualifications as the biggest barrier.

However, what is more surprising is students' concern over “not being able to find a job”. While only about a quarter of students (27 percent) reported “finding a job” as one of the best things about leaving school (possibly because it involves new responsibilities, longer hours or work than school, and changed social relationships), just under two-thirds (62 percent) reported “finding a job” as being a very easy or easy thing in leaving school. It is possible that students' concern over not finding a job is a reflection of the modern condition of youth transition anxiety discussed earlier in this report; if finding a job is relatively easy, yet someone cannot do it, what does that say about a person?

Barriers and aspirations

The following table shows perceived likely barriers and their associations with other variables. Although the greatest likelihood for barriers occurs for students with the *lowest* quartiles for focused and responsible, cognitive competency, total NCEA credits, social skills, and mother's qualifications, two barriers are more likely for the *highest* quartiles. Students who have mothers with university-level qualifications are more likely than students who have mothers with no qualifications to see relationships/pregnancy/my own children as a barrier to the life they want.

Students who scored in the highest quartile for cognitive competency are more likely than students scoring in the lowest quartile to see feeling confused over which option to take as a barrier to the life they want. This is likely to be because students scoring highly for cognitive competency are also associated with a greater likelihood of attending university and therefore have a particularly wide range of possible post-school options.

Table 34: Likely barriers

	Barrier	Lowest quartile or category	Highest quartile or category
		% who thought barrier was likely or very likely	
Mother's qualifications	Travel distances	33 (none)	9 (university)
Focused and responsible		24	10
Mother's qualifications	Family commitments	15	1
Social skills		14 (none)	4 (university)
Social difficulties (reversed)		17	2
		14	2
Cognitive competency	Health or disability	15	7
	Lack of motivation	35	13
	Not having qualifications	63	32
Mother's qualifications		63 (none)	38 (university)
	Relationships	24 (none)	61 (university)
Focused and responsible	Travelling or going overseas	27	11
Cognitive competency	Feeling confused over which option to take	28	38
Total no. of Level 1 NCEA credits	Not having qualifications	60	35

There were also associations between barriers and subject clusters. Students taking non academic subjects, in particular vocational ones, were more likely to perceive barriers than students taking academic subjects. The following table shows the associations. As with the overall frequency data shown in the Likert graph, a sizeable proportion of students picked out “not having qualifications” but it was students taking vocational subjects who were most likely to perceive this as a barrier.

More academic (55 percent arts and 44 percent science) than non academic (42 percent contextual 30 percent vocational) students believed that a lack of motivation or going with the flow was unlikely/very unlikely to stop them from having the kind of life they want. The majority of academic students (76 percent arts and science) but only half of the non academic students (49 percent contextual and 56 percent vocational) believed that family commitments were unlikely/very unlikely to stop them from having the kind of life they want.

Table 35: Likely barriers associated with subject clusters

Barrier	Academic cluster		Non academic cluster	
	% who thought barrier likely or very likely		% who thought barrier likely or very likely	
	Arts	Science	Contextual	Vocational
Lack of family support	6	11	5	21
Health and disability	3	12	11	20
Relationships	8	16	29	28
Travel distances	16	11	13	34
Not having enough time	28	30	25	42
Not having qualifications	37	45	56	64

There were also variables statistically associated with barriers that students perceived to be *unlikely*. Most of these are the reverse of the quartile or group associations shown where barriers are *likely*. These are shown in the following table.

Table 36: Unlikely barriers and associations with other variables

Barrier	Barrier	Lowest quartile or category	Highest quartile or category
		% who thought barrier unlikely or very unlikely	
Risky behaviour (reversed)	Relationships	39	60
Social skills	Not having qualifications	18	39
		14	47
Focused and responsible	Lack of motivation	36	58
	Lack of family support	59	80
Cognitive competency	Lack of family support	59	85
	Travel distances	35	54
	Family commitments	48	79
	Travelling or going overseas	38	61
Enjoyment of reading	Not having skills	36	49
	Health or disability	44	78
Total no. of Level 1 NCEA credits	Lack of family support	59	90

There were also associations between barriers and ethnicity. Pākehā/NZ European/Asian students were more often unlikely to perceive barriers than Māori/Pasifika students. The following table shows the associations.

Table 37: Patterns of association between ethnicity and perceptions that barriers are unlikely to hinder desired lifestyle

Barrier	Pākehā/NZ European /Asian	Māori/Pasifika
	% who thought barrier unlikely or very unlikely	
Lack of self-confidence	52	36
Not having skills	40	16
Family commitments	39	21
Not knowing what to do or what options to take	37	23
Not having qualifications	33	7

It is important to note that students' perceptions of barriers they might face are related to *the life they want*. So, in some cases, barriers are perceived that might not otherwise be seen as barriers, depending on aspirations. For example, students with mothers with university-level qualifications are more likely to see "relationships/pregnancy/my own children" as a barrier. However, since we have already seen that these students are also associated with a greater likelihood of *not* having a family or caring for family in the first year of leaving school and of studying full-time at university and intending to go into professional and technician or associated professional careers, these students may well have a sense of what to avoid, at least in the short term. Similarly, students scoring in the highest quartile for cognitive competency are more likely to think confusion over which options to take is a barrier but this is likely to be because these students are also associated with more school success and a greater range of study and employment options open to them. In other words, only the students with the most possibilities for their lives would perceive this confusion as a likely barrier to their having the life they want. This is a pattern of structural difference, rather than simply a question of individual choice.

Patterns for social and school characteristics

The previous report at age 16, *On the Edge of Adulthood* (Wylie et al., in press) highlighted some patterns of school and social characteristics that impacted on learning engagement and achievement. It is likely that we see the outplaying of some of these patterns in the thinking and choices of the young people as they anticipated the transition to new pathways beyond school. This section draws together patterns in the data reported across the previous sections to explore these potential links.

Social characteristics

Gender

Females were more likely than males to be planning full-time study. They were more likely to be anxious about leaving behind the routines and friendships of school and they were also less likely than males to see connections between their experiences of paid work and their career aspirations. The previous report, *On the Edge of Adulthood*, reported that females were more likely than male students to: be enthusiastic about school; have higher literacy and attitudinal scores; be in academic rather than vocational or contextual subject clusters; and to enjoy reading. For the females, any of these differences could weight choices toward more formal study.

Males were more likely to be planning to work full-time, or to choose earning-while-learning options, and to see a connection between their post-school choice to something that pays well. More of them aspired to work in trades-related occupations. Congruent with these patterns, they were also more likely to see connections between their own work aspirations and a family business or job. *On the Edge of Adulthood* reported that males were more likely to be in vocational or contextual subject clusters, and these types of courses would have exposed students to practically-based occupations that might have particular appeal if they had become less engaged with more formal learning.

Ethnicity

Pākehā/NZ European and Asian students were more likely than Māori or Pacific students to be planning full-time study and they were more interested in professional careers. This is congruent with their higher levels of school engagement, their higher literacy and numeracy scores at age 16, and higher scores for the attitudinal competencies *thinking and learning* and *focused and responsible* (as reported in *On the Edge of Adulthood*).

Conversely, Māori or Pacific students were more likely to expect to be working full-time. Overall, these young people seemed to be less optimistic about their futures, with more of them seeing barriers to achieving the lifestyle they wanted. *On the Edge of Adulthood* reported that they were less likely to be satisfied with their subject choices and more likely to be in vocational and contextual subject clusters. Their teachers tended to hold lower expectations of their learning success and a third of them had achieved fewer than 80 Level 1 credits—an obvious barrier to pathways to future study. Nevertheless, Māori and Pacific young people were more likely to say they had found talking to school staff and the careers advisor helpful—but then again they are more likely to be in groups targeted for “life skills” courses that focus on preparation of life and work beyond school.

Maternal qualifications and family income

Both their mother's lack of formal qualifications and being from a low-income home were associated with students seeing not being hassled by teachers as one of the best things about leaving school. This association suggests a lack of connection between some teachers and these students, the nature of which is described in some detail in *On the Edge of Adulthood*. Both of these social characteristics were also associated with a greater likelihood of not going on to tertiary study, including at university. Lack of maternal qualification (but not low income) was also associated with not seeing a professional occupation as a likely choice, and anticipating a trades-based choice of work. Students from high-income families were more likely to say their parents had been a helpful support for their careers thinking.

Students from low-income families more often attend low-decile schools. Here, too, there were associations that add to the picture of relatively fewer choices for these students. Students in decile 1 or 2 schools were less likely to say they would attend university, more likely to say they might choose a free Youth Training programme, and to see a career as a job with high status.

Effects of ethnicity are difficult to separate out from income, maternal qualifications, school decile, and school gender mix. About half of the Māori or Pacific young people in the study at age 16 were from low-income homes and schools have an especially important role in helping them to learn in ways that support them to see opportunities and that keep pathways open for them. They do less well at school and so have less room to move in terms of ongoing options. The school characteristics summarised next could be seen as evidence that some students "bring things on themselves" by the ways they behave both in and out of school. However, the data reported here, like data from other New Zealand research based in secondary schools, suggest that structural inequalities in schools contribute much to the educational outcomes and future life choices of these students.

School characteristics

Subject cluster

On the Edge of Adulthood describes four subject clusters that have strong similarities to those found in the Learning Curves project that investigated the introduction of NCEA into six New Zealand secondary schools (Hipkins et al., 2005). The four clusters we found across the 60 or more schools attended by students in the Competent Children, Competent Learners sample divided into two academic clusters (one with an arts orientation and one with a science orientation) and two clusters that we called contextual (which tended to group subjects that made connections to life outside school such as media studies) and vocational subjects (Wylie et al., in press). Similar to findings in the Learning Curves study, Māori and Pacific students were more likely than Pākehā/NZ European and Asian students to be taking a contextual or vocational subject combination and were less likely to be taking academic subjects. Males were also more likely than females to be taking contextual or vocational subject combinations while females were more likely to be taking a traditional academic science combination (Wylie et al., in press).

These four clusters were associated with a number of aspects of post-school decision making. Students in either of the academic clusters were more likely to be headed for full-time university study, after which they aspired to work in a professional occupation. By contrast, students taking contextual or vocational subject combinations were more likely to see not having teachers hassle them and not having to do school work as best things about leaving school. The preceding sections of this report have documented enjoyment of reading as a variable associated with a range of aspects of post-school decision making—aspects such as full-time university study that anticipate a need for ongoing learning. Here we see a pattern that suggests students taking certain sorts of subject combinations are more likely to be already on the way to being switched off from learning—at least in

the short term—as they are from reading. But there are some suggestions that this is not a direction undertaken lightly—students in vocational and contextual clusters were more likely to say that lack of qualifications would be a barrier to the sort of life they wanted—and indeed to see a range of barriers that did not seem to be as constraining for other students.

Some aspects of choices are constrained by material resources. Students taking contextual or vocational subject combinations were more likely to be contemplating earning-while-learning options, to aspire to a trade, and to see connections between current and future work options. We have already seen that these types of choices have associations with students' socio economic status, but it is not so clear that there *ought* to be a connection between their home circumstances and the combinations of subjects available to them at school. The Learning Curves research reported that assumptions about the learning needs of certain “types” of students can influence the guidance they are given, in particular by deans (Hipkins et al., 2005). To make timetable lines work, students taking “alternative” courses are more likely to be placed in at least some classes against their will—partly because there are simply less options available to create different types of subjects once all the more “academic” subjects have been allocated timetable spaces. This in turn influences the range of learning experiences to which these students are exposed at school, and in turn, the possibilities they can see for their futures.

Adding to this picture of inequalities in opportunities, the Learning Curves analysis suggested that even “core” subjects such as English and mathematics, seemingly taken in common by most students at least until the end of Year 11, will look very different for students in these different clusters, and will be assessed by quite different combinations of achievement and unit standards (Hipkins et al., 2006). This is not just of academic interest—entrance to university is enabled or constrained by having the correct combination of four factors: total number of Level 3 credits; a literacy requirement; a numeracy requirement; and having credits, mostly from achievement standards, distributed in certain ways across “approved subjects” from a published list generated in consultation with university vice chancellors. Recent research from the Star Path project at Auckland University has shown that, of those four factors, not having the correct distribution of credits across subjects is likely to be the main “choke point” for Māori and Pacific students in low-decile schools. Even if they satisfy the other three requirements, not having “chosen” a subject combination that will yield the necessary pattern of credits is likely to be what will prevent them from taking up university study immediately after they leave school (McKinley, 2008). Since clustering practices mean these students are more likely to find themselves in subjects that are “not approved” than in subjects that are, it is not difficult to see how school timetabling practices contribute directly to this outcome.

Total number of NCEA credits

Patterns associated with total number of NCEA credits gained at Level 1 are congruent with those for subject clusters and, if anything, emphasise the differences in outcomes for certain “types” of students even more strongly. Even though most students have gained all or most of their Level 1 credits by the end of Year 11, with potentially two more years of school still to go, this total may be acting as a strong signal about future directions. It appears to affirm future study directions, and in this way may be acting as the same sort of sorting and filtering agent as the School Certificate examination it replaced (Bolstad and Gilbert, 2008).

Students in the top quartile for NCEA credit totals at Level 1 were more likely to be planning full- time university study, and less likely to be heading for polytechnic, learning-while-earning, or Youth Training options. The difference was very marked: 90 percent of those in the top quartile said they were headed for university, compared with 33 percent in the bottom quartile for Level 1 NCEA credits. Of all the variables associated with choosing university or not, this was the most marked difference. By contrast those in the lowest quartile were more likely to see not having teachers hassle them and not having to do school work as best things about leaving school.

Students in the top quartile for NCEA credit totals at Level 1 were more likely to aspire to professional careers. Again, the difference was very marked (80 percent for top quartile vs. 29 percent for lowest quartile). Those in the lowest quartile were more likely to be heading for a career in a trade—an option chosen by *not one* student in the highest quartile for NCEA credits. They were also more likely to see work experience as useful for learning about careers, where students in the top quartile were more likely to find their school subjects useful for this.

Risky behaviour

We include risky behaviour under school characteristics here because it concerned behaviour in relation to school insofar as the students seemed to have already left school in their minds. Students in the quartile that showed the most evidence of risky behaviour outside of school also showed signs of the impact of this in school. They were more likely than other students to agree that not having teachers hassle them, and not having to do school work would be best things about leaving school. These students were also more likely to be looking forward to getting away from family and getting a job. They were less likely to be considering further study and more likely to be considering earning-while-learning options.

Associated with their focus *away from* school and formal learning, students with risky behaviour were more likely to indicate an interest in sales/services careers and to see an association between the idea of a career and on-the-job training. They were the most likely to see an association between paid work they had already experienced and their career aspirations, and were the group most likely to already be in paid part-time work. They were less likely to have found their families helpful for careers thinking, or to have found school subjects helpful in this respect.

The picture that emerges here is of students who were out-of-step with the wider possibilities that school was opening up for some of their peers. How they could see themselves “being” in the world was more bounded by the limits of their immediate experience and many options already appeared closed to them. Can we reasonably expect schools to compensate for students’ “deficits” in some of these social characteristics? Do schools contribute to these already-evident inequalities in ways they could ameliorate if they were more aware of them?

Conclusion

This report has focused on student perspectives on leaving school, anticipated opportunities and barriers, pathway and occupational aspirations, influences and motivations, and notions of “career”. Their perspectives provide important information about the experience of the transition from school and what could be useful for thinking about support provided to students at this time.

A number of initiatives have emerged to try to assist with students’ transition from school. The Secondary-Tertiary Alignment Resource (STAR) and Gateway scheme provide tertiary-level and workplace learning opportunities and experiences for students that are useful in allowing students to explore, (re)adjust, or kick start future plans. The recently launched Schools Plus scheme has the goal that “all young people are in education, skills, or structured learning relevant to their abilities and needs, until the age of 18” and particularly addresses itself to early school leavers with low or no qualifications and “inactive” young people not engaged in work, training, or education after leaving school.⁸ The Creating Pathways and Building Lives (CPaBL) and Better Tertiary and Trades Training Decision Making (BTTTDM) initiatives both recognise the growing complexity involved in young people’s post-school decision making and their support and guidance requirements. CPaBL addresses this by focusing on the structure of careers education in the school. It fosters a school-wide approach that explicitly links the careers advisory team with school management so that information and guidance is better co-ordinated. BTTTDM addresses the information and guidance issue by creating a “one-stop-shop” service for young people, parents, and other influencers, providing information and support for tertiary education and career pathway decisions.

These initiatives take different approaches but they share some common themes in attempting to provide *more* information and better *access* to it; a better *quality* of information; *co-ordinate* information and guidance within and between institutions; and provide guidance to help students *understand* the information. Arguably the most significant thing the initiatives do in terms of the “pathways framework” or broader landscape of the transition from school is to continue positioning of students and young people as the key decision makers. Even where Schools Plus is looking to place obligations and conditions on young people, there is an emphasis on having a range of options from which young people can choose. This follows the invocation of choice in the wider context of a (Western) society saturated with (consumer) choice and usually expressed in individualistic terms. It says to young people that no matter what your background or rate of school success, there is a pathway to a good future for you (Vaughan, 2005). What we have to do, then, is to help you, the student or young person, find or create that pathway.

Choice complexity

There are two major issues with this situation that remain unresolved. The first issue is that all this can be very confusing and overwhelming for young people. They are asked to make choices (decisions) about a greater range of choices (options) beyond school, including tertiary study courses and programmes, training within and for different industries, careers, and conditions of employment. They are also asked to make some choices while they are at school (which are likely to affect their later or future choices). School choices include decisions about school subjects and programmes of learning, elements of assessment and credit, school-based qualifications—all

⁸ This was foreshadowed in 2003 by the Education and Training Leaving Age Package and a focus on co-ordinating the youth transition services through a cross-departmental Youth Transitions Steering Group which aimed to have “all 15–19-year-olds in appropriate education, training and work by 2007” (New Zealand Treasury, 2003, p. 9).

of which are becoming increasingly multi faceted as schools attempt to recognise, meet, and shape a wider range of students' needs.⁹ Not only that, but we expect students and young people to have a hand in identifying their own learning and pathway needs and at the very least be able to discuss them with teachers and advisors. In *On the Edge of Adulthood* we saw that close to 30 percent of students, and more of those who had left, wished they had had better advice on the subjects they took, and 20 percent were not satisfied with their subject mix. So young people today must deal with a proliferation of choices but also a modern context that demands ever more reflection and justification of those choices (du Bois-Reymond, 1998), leading to a need for teachers and careers advisors to help young people with those choices.

Our data show that students understand themselves to be the key decision makers in their lives, particularly around pathways from school. In response to our question about what would be best about leaving school, students agreed most with statements focused around making decisions and having a greater range of choices, or the means to follow them up. Eighty to 85 percent agreed it would be best to be earning money, choosing how to spend time, being treated as an adult or being an adult, making own decisions about life, choosing what to study, and meeting different people. Sixty-eight to 77 percent agreed it would be best to be in charge of their learning, career, and work: choosing what to study, establishing a career, learning real-life things, learning in a way that suits me, putting school learning into real world practice. Other aspects of leaving school and reorienting relationships, such as getting a job, not having to do school work, establishing new routines, getting away from home town, were not seen quite so positively.

While students saw the decision making aspects of leaving school positively, they also saw them as challenging. This was particularly so for pathway and career decision making. Students picked out establishing a career, working out what they wanted to do, and statements about managing time and money as the things they expected to find hardest when leaving school. In fact many of the things students thought would be best, were the things they also thought would be hardest, suggesting some overall anxiety about the life tasks ahead. This can be understood as part of the impact of a modern society's emphasis on individual responsibility and choice—apparent for young people in the requirements to make an increasing number of decisions, spanning a greater range of areas, with more far-reaching consequences, throughout school and beyond. While students in our sample are attracted to making their own decisions, they also show some awareness of the gravity and challenge of those decisions.

Students reported their own pathway interests and needs in response to our questions. Nearly three-quarters of the students expected to undertake some form of tertiary study in the first year of leaving school and half expected to do some travel in that time. Between a quarter and a half of the students chose more than one likely or very likely study, travel, or employment option for the first year of leaving school, suggesting some were considering different ways of pursuing particular interests and were factoring in possible changes of direction (losing interest or discovering a new interest) or disappointments (not gaining entry to a study programme). More than half recognise a need to study towards qualifications more than once in their lifetime, usually in order to deepen their expertise in a particular area.

Students were also able to identify useful connections and activities for helping them think about careers. A wide variety of activities were useful but not necessarily very useful. But of the activities that were useful, most involved relationships—with family, friends, and teachers or careers advisors at school—or learning through a classroom-based subject. More thought could be given to supporting families, as BTTTDM is currently exploring (Career Services, 2007a).

⁹ For a detailed research project on school subject choice systems and its impact on young people and their in-school and post-school pathways, see Hipkins et al. (2005).

A surprisingly high proportion of students had *not* taken part in career-specific activities. However, given that careers education tends to be regarded as an intervention rather than an integrated activity for all students (Vaughan & Gardiner, 2007), our particular dataset of students with an over-representation of more affluent and advantaged backgrounds means they are less likely to fall into a category seen to require careers education as an intervention.

Certainly there is some recognition in recent government initiatives of the challenges inherent in choice proliferation. It is precisely why so much effort is going into providing better access, quality, and co-ordination of information. However, there is less recognition that young people make their choices within, and as they pass out of, an environment (i.e., school) that has not necessarily prepared them for being able to make choices well. This is because schools have not tended to move with the paradigm shift to a knowledge society, including its related concepts of post-Fordist society and fast capitalism (Gilbert, 2005). In a world of “accelerated flows” between nations (of people, ideas, and money) (Appadurai, 1996), fragmenting structures and institutions (e.g., family, moral leadership) (Beck, 1999), and rapid technological development, labour markets now demand different skills of workers and therefore also different kinds of employer–worker relationships.

These things make forging a career a fundamentally trickier proposition than it used to be because people must now take account of *movement* and *shift* throughout their careers and lives—hitting the spot where career used to define lives in a more reliable and fixed sort of way, including one where balancing work and other aspects of life was not the issue it is today. But, as Gilbert (2005) argues, despite all the talk about knowledge society and new employer–worker relationships, people do not necessarily understand these things well and so schools still teach 20th century skill-sets to students, operating as though the shift was not happening and the relationship between school and the world of work was not being called into question (again) in new ways.

Throughout this report there is evidence that students recognise some kind of shift and distinction between careers and jobs, but are unclear as to what the shifts might really look like for their further studies, working lives, and careers. Students’ responses indicate that while careers and jobs are both important, they are different things and come with different sets of demands and satisfactions. Students saw “finding a job” as easier than “establishing a career”. A labour market favouring employees may have helped persuade them that finding a job is not necessarily difficult. However, students are also possibly distinguishing between a job as a way to earn money and career(s) in terms of work and lifestyle choices and personal identity. Students may have a sense of career shifting away from being a fixed structure to being a process (Wijers & Meijers, 1996) and involving a series of decisions, particularly where it involves further studies before (and also even after) finding a job. It may also be that finding jobs throughout life now depends more on figuring out what you want, rather than following a set path. Students rated “working out what I want to do” as harder than “finding a job”, but easier than “establishing a career”. When students responded to statements about what a career is, although 67 percent of students were in agreement that a career means “having a job” and just 18 percent in disagreement with that, only 13 percent could *strongly* agree, suggesting that students recognised having a job is a necessary, but not sufficient, condition for having a career.

When we examined students’ responses to different ideas about careers, we found that they tended to agree most with the more traditional ideas about career associated with having a job that you can do well, that offers promotion within the same workplace, that pays over \$35K, that has high status, that requires a university degree. Students showed more uncertainty of agreement about the more recent and uncertain ideas about “career”—qualifications that enable you to travel and work, different jobs in different workplaces using similar skills, several jobs at one time relating to one career area. This is not surprising. These ideas are themselves about addressing future uncertainty in terms of the individual’s career portfolio, the workplace in a global and skill-evolving context, and within broader technological, social, and economic changes. In addition, students are likely to be experiencing the kind of school-based careers guidance that privileges the provision of career

information over the development of the kind of self-management and career management skills needed to flourish beyond simple *entry* to a course of study or the labour market (Vaughan, 2007; Vaughan & Gardiner, 2007).

Students did show a high level of agreement with two emergent career ideas. Students' agreement with a career being about qualifications for building on with more qualifications may reflect (some) students beginning to understand themselves as a kind of ongoing enterprise (Vaughan et al., 2006). However, it may also simply be that students are thinking of building on qualifications in order to deepen expertise in one very specific career area rather than to span or link different areas in new ways. Students' agreement with career being about being in paid work with enough time for family, friends, and leisure activities suggests there is a high level of interest in work-in-life balance and is consistent with other New Zealand research showing some school leavers taking an integrated approach to "work", "career", and "life", although the ways they do this vary (Vaughan et al., 2006). However, the lack of consistency across students' formal careers education experiences and careers staff ability to provide careers education consistent with career *development* and *management* (Vaughan & Gardiner, 2007) means that students are likely to struggle to get to grips with shifts between traditional and emergent ideas about career and the workplace.

If the teacher's tricky job is to prepare students to be successful in existing social structures *and* be active agents in changing those social structures (Skilton-Sylvester, 2003), then we probably need to support teachers (and especially, but not only, careers advisors) to do something differently in preparing young people to think about their lives beyond school. And "doing something differently" is likely to need to be something beyond providing more, better, and better-accessed information. It is likely to need to be about changing what we think knowledge, learning, and teaching is (Gilbert, 2005; Pink, 2005). *The New Zealand Curriculum* (Ministry of Education, 2007b) potentially moves school curriculum this way but only if the opportunities are seen and taken up. Specifically, in terms of the transition from school, a useful change could be helping students *construct* their careers in relation to their lives—which means understanding that this career construction is not the entirety of personal identity (paid work is important but its role may change over time), does not happen just at the point of leaving school (it is lifelong), and does not necessarily happen in linear ways (there are predictable and unpredictable changes) (Vaughan et al., 2006).

Structured choices

This leads into the second issue of how we understand and account for choices facing, and made by, young people. These choices are structured, even though the pathways and choice narratives within which people operate rarely recognise this—as other research has shown by drawing attention to the social and institutional structures that constrain or enable choices for individuals or groups (Furlong & Cartmel, 1997; Raffe, 2001; te Riele, 2005). Research has shown, for example, that there is a differential distribution of the nature of transition risk for different young people (Furlong, Cartmel, Biggart, Sweeting, & West, 2003) and that schools structure the subject choices of students, which in turn structure the in-school and post-school pathways available to students (Hipkins et al., 2005). It has also shown that participants' own silence about structural constraints does not mean this is unimportant but rather it is taken for granted and constituted in terms of individual choices (Brannen & Nilsen, 2005, p. 426). Moreover, young people may have a particular investment in explaining their transition "choices" in particular ways that avoid recognition of structural constraints (Vaughan et al., 2006).

In this report, indicators of structural constraints around pathway and career-related choices appear in particular around maternal qualifications, family income at age 16, ethnicity, and subject cluster. For example, Pākehā/NZ European and Asian students are more likely to expect to enter full-time study, aspire to professional careers, and take academic subjects. Māori and Pacific students are more likely to expect to work full-time on leaving

school and take contextual and vocational subjects. Students taking contextual and vocational subjects are also more likely to think the best thing about leaving school is not having teachers hassle them and not having to do school work. They are also more likely to be interested in earning-while-learning options. Students with mothers who have low qualifications are less likely to aspire to professional occupations. Students with a high family income are more likely to see their families as a particularly useful support in talking about careers. Students whose mothers have low qualifications and a low income are less likely to aspire to tertiary study.

Throughout the report, students who do well in the areas most valued by teachers and school (e.g., enjoyment of reading, being focused and responsible, high cognitive competency) are consistently more likely to see themselves undertaking tertiary study, often university, having professional occupations, and fewer barriers to the life they desire. In short, they are more likely to have a learning identity that predisposes them to undertake tertiary study in the first year of leaving school and possibly undertake more formal learning later in life too.

Our report shows that the importance of research that looks into the structured nature of transition choices cannot be underestimated because the key transition-from-school focus on young people as decision makers comes with the risk of missing the patterns of young people's engagement with school and how their learning identities, transition perspectives, and choices come to be structured. In some cases this structuring manifests as pathways from school which are already being closed down. Building on research which has questioned what a "proper" transition from school might actually be (Vaughan et al., 2006), our report suggests that students who do not successfully negotiate the transition are not necessarily individually at fault. By examining how students come to see themselves as learners, now and into their work and study future, and their aspirations for career and work-in-life balance, alongside social and school-mix characteristics, we are better able to understand and address inequalities to help all students to successfully negotiate the transition from school.

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