Pacific Adolescent Career Pathways: Final Report

A report on future labour market opportunities and education pathways for Pacific peoples

July 2014

MINISTRY OF PACIFIC ISLAND AFFAIRS

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Acknowledgements

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Executive Summary

This is the third and final report on the Pacific Adolescent Career Pathways research that has been undertaken between 2010 and 2013.

Purpose of research

The Pacific Adolescent Career Pathways research is a longitudinal study that explores and addresses information gaps in the formative years of career planning of Pacific adolescents. In particular, it was designed to gain an understanding of students' careers choices and the factors that influence them.

The research findings provide a rich description of Pacific students' experiences and a foundation for agencies to develop recommendations for policy development and delivery of career-based services for Pacific youth.

Research focus

The study follows 918 Pacific secondary school students from Year 9 to Year 11. It tracks career pathway development, aspirations and career management competencies, and explores the major influences on students' career aspirations, early subject choices and career decisions.

Overview of findings

The study highlights the need for measures to be developed that enable, encourage and support Pacific students to:

- maintain and pursue high educational and career aspirations
- maintain expectations that they can achieve their aspirations
- make informed early subject choices
- be aware of how early subject choices can affect their future qualifications and employment opportunities
- be aware of the financial impact of student debt resulting from enrolment in subjects or withdrawing from them before completion.

Overall, the research findings show that students need increased access to support when selecting subjects during their formative secondary school years. Subject selection is a critical component of students' career planning, yet access to and use of potential sources of help do not appear to receive the same degree of attention as does career planning.

In relation to compulsory subjects, most students strongly agreed that English is essential for enabling and achieving future study and career goals. Students' awareness, however, needs to be increased with regard to:

- the career opportunities that are reliant on maths and science
- the government initiatives available to increase Pacific representation in the health and trades workforces
- the academies and other support available in specific school settings for students to develop their vocational pathways.

The research results indicate that, despite supportive surroundings (at school and home), psycho-social factors such as self-belief, confidence and motivation are lacking for many students.

While it is commendable that investment has been made in resources to educate Pacific parents, families and communities, investment in activities that focus on enhancing the self-confidence and self-belief of students in school settings is limited. This is despite school principals perceiving that a strong sense of school spirit, sense of belonging, self-pride, confidence, esteem and motivation are important enablers to enhancing Pacific learners' achievements.

Most students in the cohort were involved in extra-curricular activities, with the highest proportion involved in church and sports activities. The research also shows that affiliation with church groups was perceived as a significant influence in the development of cultural identity, alongside family, and this enhances students' confidence in their ability to do well in school. Involvement in these activities enhances students' leadership, time management and social skills and, in turn, their confidence and self-belief. Therefore, acknowledging and building on these skills within the school setting may serve to enhance learner achievement.

Key findings

Key findings of the research answered the following three questions.

1. Do students know what they want to achieve?
2. Do students know how to achieve their career aspirations and expectations?
3. What support is available to help students achieve their career aspirations and expectations?

Key findings about career aspirations and expectations

- The proportion of students who did not know what either their career aspirations or expectations were increased between the first and third survey.
- Thirty-seven percent of students' career aspirations matched their expectations.
- Thirty-three percent of students in the third survey did not have career aspirations, and 50% did not know what career they expected to go in to.
- Nearly two-thirds of students in the survey had not chosen a career and most of these students reported feeling worried about it.
- Most students intended to continue to further education or training after secondary school, though a significant proportion (around 20%) intended to enter employment directly.
- Students often aspired to a level of education they did not expect to achieve.
- Few students aspired to, or expected to enter, trade careers. Most commonly they aspired to professional, community or personal service careers.

Key findings about career planning and subject selection

Students reported high levels of confidence in and positivity about their career skills in the first and second survey, though confidence levels decreased between the second and third survey.

- Students' education expectations often did not match the level of qualifications required by their career expectations.
- Students most commonly chose their non-compulsory subjects between Year 9 and Year 11 based on personal interest rather than for career reasons.
- Many students took advice from family and school staff about career choices but few chose their subjects based on that advice.
- Almost 25% of students in the third survey did not know if they were taking the right subjects for what they wanted to do when they left school.
- Over 33% of students did not know if their school offered an academy or other initiatives for developing vocational pathways.

The proportion of students reporting that no one helped them choose their subjects reduced between the first and third survey. However, a substantial proportion of students did not receive help with choosing subjects at an important point in their education pathway.

Key findings about sources of support

- Students were confident that they knew who to ask for careers advice.
- Higher proportions of students relied on others (mostly parents) outside of the school environment for careers advice.
- Around one-third of students indicated their fathers never, or only occasionally, listened to them and discussed their thinking about their future career.
- Around one-quarter of students never, or occasionally, discussed future employment or tertiary education with their fathers.

More students relied on teachers and career guidance counsellors for help and advice on their careers than they did for choosing what subjects they were taking.

- Students reported being very positive about their relationships with their teachers.

Factors in regression modelling

The following factors were considered in the regression modelling analysis conducted as part of the study:

- students' relationships with their teachers
- students' understanding of their own culture
- students' exposure to non-Pacific cultures
- parental expectations and involvement
- students' confidence in choosing a career and positivity of feelings about their careers
- students' level of uncertainty about careers and difficulty in relating interests to a career plan.

Results of regression modelling

The following conclusions were drawn from the regression modelling.

1. Students were more likely to have chosen a career if: they were female, they had higher exposure to non-Pacific cultures, their parents were involved and had expectations and relatives were supportive and involved.
2. Students whose career aspirations matched their expectations were more likely to be male, like school, spend time with non-Pacific groups, be more familiar with New Zealand ways and have confidence in their skills and career choices.
3. Students' expectations were more likely to match their aspirations when they were female, they had confidence in their ability to do well at secondary school, they had good relationships with their teachers, and relatives were supportive and involved.

Method

The three-year study involved a mixed-method design that consisted of three waves of survey data collection with the same cohort of Pacific students, and two in-depth qualitative phases with a sub-sample of these students.

This report compares student cohort responses from surveys 1 and 3, with a focus on the final survey. It also incorporates qualitative findings from two phases of in-depth interviews.

The surveys contained more than 300 items across a range of topics. To draw findings from the survey, data factor analysis was used to create scores that sat across related questions in each topic area. These scores were used to create the regression models presented in this report.

Research sponsors

The research was developed and jointly funded by MPIA, MoE, ERO and Careers New Zealand.

1 | *Introduction*

Information provided under the Government's Better Public Services targets indicates that, in 2010, a lower percentage of Pacific and Māori students left school with National Certificate of Educational Achievement (NCEA) level 2 or above) compared with other ethnic groups.[1] Pacific students were also less likely to fulfil the requirements to enter university compared with European, Asian and Maori students (26.1%, 57.3%, 54.2% and 31% respectively).[2] One of the Better Public Services targets focuses on increasing achievement of NCEA level 2 among Pacific students; with the overall aim being to have 85% of all students achieving NCEA level 2 by 2017.[3] This will require real effort and one that will make a lasting impact on Pacific students and their families. Furthermore, the main area of New Zealand's future workforce demand will be skilled workers in the professional, community and personal services, and technicians and trades categories.[4]

Current education trends for Pacific students, and the workforce demands in New Zealand, show the importance of having well-planned career pathways that provide direction for future education and career opportunities. Such planning increases students' chances of making the right subject choices that will support and develop their future career goals. Several factors can influence students' education decisions and choices, such as family, school and others.[5, 6, 7, 8]

The aim of the Pacific Adolescent Careers Pathways study was to gather information on how to bridge the gap between leaving school and starting a career by understanding more about Pacific students' career choices and the factors that influence them. The study was jointly funded by the Ministry of Pacific Island Affairs, the Ministry of Education, the Education Review Office and Careers New Zealand. It is a longitudinal study that followed the early career pathway development for a cohort of Pacific secondary students from Year 9 to Year 11.

The study focuses on:

- examining the career pathway development and aspirations of students in years 9, 10 and 11, what and who influences these students and how these influences affect students' subject choices and aspirations for achievement
- tracking changes in students' career pathway development, aspirations and career management competencies over time
- assessing whether students' career needs are being adequately met.

The study describes student experiences and provides a foundation for partner agencies to develop recommendations about next steps in policy development and delivery of careers-based services to Pacific youth.

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1   The Better Public Services target (2012) indicates that Pacific students' actual achievement of NCEA level 2 or equivalent in 2010 was 60.2%. See Table 1: Percentage of 18-year-olds with NCEA level 2 or higher, by ethnicity at www.ssc.govt.nz/bps-boosting-skills-employment (accessed 23 July 2014).

2   Ministry of Education. (2012). *Education Counts*. http://www.educationcounts.govt.nz/statistics/schooling/senior-student-attainment/ncea-attainment/university-entrance-attainment (accessed September 2014)

2   Better Public Services. (2012). www.ssc.govt.nz/better-public-services (accessed 21 July 2014).

4   Ministry of Pacific Island Affairs. (2010). *Career Futures for Pacific Peoples: A report on future labour market opportunities and education pathways for Pacific peoples*.
www.mpia.govt.nz/assets/documents/research-documents/CareersFuturesFinalWEB.pdf (accessed 21 July 2014).

5   Gorinski, R., & Fraser, C. (2006). *Literature Review on the Effective Engagement of Pasifika Parents and Communities in Education (PISCPL)*. Report for the Ministry of Education. Wellington: Ministry of Education.

6   Madjar, I., McKinley, E., Jensen, S., & Van Der Merwe, A. (2009). *Towards University: Navigating NCEA course choices in low-mid decile schools*. Starpath Project. Auckland: The University of Auckland.

7   Mara, D. (1998). *Pacific Islands School–Parent–Community Liaison Project: An independent evaluation project*. Wellington: New Zealand Council for Educational Research.

8   Vaughan, K. (2008). *Student Perspectives on Leaving School, Pathways, and Careers*. Ministry of Education: Wellington. www.educationcounts.govt.nz/publications/ECE/2567/35117/3 (accessed 21 July 2014).

2 | *Method*

The study used a mixed-method approach involving three survey collection waves and two qualitative interview phases providing student responses on six key domains (Table 1).

Table 1: **Data collection points for surveys 1–3**

Survey number	Component	2010	2011	2012
Survey 1 Year 9	Pilot	Nov		
	Survey (n = 918)		Jan–Jul	
Survey 2 Year 10	Pilot		Oct	
	Survey (n = 668)		Nov–Dec	
	Qualitative (n = 16)		Sept–Oct	
Survey 3 Year 11	Pilot			Aug
	Survey (n = 551)			Aug–Oct
	Qualitative (n = 16)			Apr–Jul

2.1 | *Pilot studies*

Pilot studies were conducted before each survey wave to test the survey measurements, language, design and length. Each pilot study was conducted with the same group of Pacific students from a co-educational, decile 4 school in Auckland.[9] The maximum number in the pilot studies was 20 students.

2.2 | *Sample design and recruitment*

The sample design for the survey component was based on power and sample size calculations that aimed to collect information from 1,000 Year 9 Pacific students enrolled at 25 to 40 schools, so that the average cluster size ranged from 25 to 40 students per school. The study identified 47 schools within the Auckland region with 20 or more Pacific students enrolled. Over 30 schools had initially agreed to participate, and 27 were recruited and retained across the three survey waves. The remaining three schools were not included because they were unable to confirm suitable dates for data collection within the allowable timeframe.

A sub-sample of 16 students was purposively selected to conduct in-depth semi-structured interviews at years 10 and 11. A selection guide was developed to help teachers within the 27 baseline schools to identify students with a mixed range of academic abilities, Pacific ethnicities and gender, where possible. Students and their parents received an information pack informing them about the aims of the project and a consent form. Students' participation was voluntary and based on the consent of their parents.

2.3 | *Study design and procedure*

Two data collection methods were used in the study:

- a self-completed survey, in computer or paper format
- face-to-face semi-structured interviews.

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9   A school's decile rating indicates the extent to which it draws its students from low socio-economic communities. Decile 1 schools are the 10% of schools with the highest proportion of students from low socio-economic communities, whereas decile 10 schools are the 10% of schools with the lowest proportion of these students.

A similar survey was used for all three cohorts with modifications made to suit different experiences of the year groups and to incorporate learnings from the previous surveys. Survey topics included: demographics, culture and identity, school factors, future aspirations and expectations, career choices and planning, and family relationships and support. The surveys were administered to students via computer, where possible, and others completed paper versions.

In the first qualitative interview, students were asked open-ended questions about: ethnic and cultural identity, school factors, future aspirations, career choices and planning and family relationships. The second interview was informed by the first interview findings and included questions about: parental and other participation, school factors, aspirations and expectations, career pathways and opportunities. The qualitative interviews complement the survey findings. Students were interviewed at school at a time convenient to them. Interviews were no longer than 60 minutes.

2.4 | Response rates

In the first survey, 918 students participated out of 2,618 eligible students in the participating schools, a response of 35%. In the second survey, 668 students out of the original 918 participated, resulting in a 73% retention rate. In the third survey, 551 responses were collected, which was a retention rate of 60% from survey 1 and 83% from survey 2 (table 2).

Reasons for attrition included students not being present on the day the survey was conducted, students having left the school or opting out of taking part in the second and/or third survey waves. Due to time and resource constraints, students who were not available on the day of the survey were not followed up.

All of the 16 students selected for the interviews took part in both interviews.[10]

Table 2: **Number of responses and rates of attrition for surveys 1 to 3**

	Survey 1	*Survey 2*	*Survey 3*
Number of responses	918	668	551
Retention from previous	–	73%	60%
Qualitative interviews			
Number of responses	–	16	16
Retention from previous	–	-	100%

2.5 | Analysis

The survey data were analysed in SPSS (the software used for statistical analysis) as three cross-sectional studies. Identifiers were only collected in surveys 2 and 3, thus tracking of individual responses is only possible between these two data collection points. Responses were weighted to allow comparison between the surveys. Weighting was deemed necessary, because attrition was lower in the high-decile schools.

Weights were determined by two factors:

- probability of selection in the sample determined by the sample size and the total population of eligible students at schools in each decile group
- attrition between surveys of the respondents in each of the decile groups.

Weightings for each decile grouping are provided in Appendix 1.

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10   At Year 11, one student had left school and was replaced by another student from the study.

2.6 | *Factor analysis and regression modelling*

The surveys contained more than 300 items across a range of topics. To help in drawing findings from the data, factor analysis was used to create scores that sit across related questions in each topic area. The factors identified with this approach were:

- **relationship with teachers:** students' relationships with their teachers, for example, whether they thought their teachers cared about them, encouraged them in school or believed they could succeed in school
- **cultural understanding:** students' understanding of, and exposure to, their culture and their culture's language, for example, time spent in their culture's social setting and students' sense of belonging
- **exposure to non-Pacific cultures:** time spent with non-Pacific groups and exposure to New Zealand cultures, for example, contact with non-Pacific families and their relatives
- **parental expectations and involvement:** the expectations and involvement of students' parents
- **support from relatives:** support students received from their relatives, for example, help with homework and interest in career choices
- **career confidence:** students' confidence in choosing a career and feeling positive about their careers, for example, getting excited when they thought about their careers and understanding their work-related interests
- **career uncertainty:** students' uncertainty about their careers, for example, having difficulty relating their interests to a career plan.

In analysis, each student was assigned a score for each factor. The scores were used to create regression models for each of the key outcomes:

- expecting to achieve the level of education the student aspires to achieve
- expecting to enter the career the student aspires to enter
- knowing what career the student wants to enter
- being confident in doing well in secondary school.

Results of the regression modelling are presented in tables throughout this report. Further details of the method used are provided in Appendix 1.

2.7 | *Strengths and limitations*

This report compares cohort responses from students from surveys 1 and 3 with a focus on survey 3. The Ministry of Pacific Island Affairs and partner agencies designed the questionnaires and data collection methods. Malatest International provided the analysis and reporting.

One of the advantages of conducting longitudinal studies is the ability to observe the same participants and identify changes over time. In this study, the majority of students were observed over each of the three surveys. The response rate to survey 1 was 35%. Although some attrition occurred between surveys, survey responses were weighted to account for this. Identifiers were not included in survey 1, limiting the analysis primarily to a cross-sectional design. Individual responses and longitudinal analysis are provided only for the case study participants between surveys 2 and 3.

The addition of interviews with a sample of students in surveys 2 and 3 provided depth to the information about students. The interviews also provided context relating to the high proportion of positive responses given by students to many of the survey questions.

2.8 | Important findings from surveys 1 and 2

Results from surveys 1 and 2 indicate that, in general, Pacific students aspire to a range of careers, including in professional, community and personal services. They also aspire to high qualifications but do not necessarily expect to achieve them.

Reasons for students' subject choices changed between surveys 1 and 2. In survey 2, students were more likely to say that they chose their subjects because they were compulsory or for personal interest. Mothers were consistently shown to be the person most students relied on for education and careers advice. However, in survey 2, students were beginning to access school resources more to help with their career choices.

This report outlines the findings across the three surveys and these are complemented with key qualitative data from the individual interviews. The report is divided into the following sections:

- What is the profile of Pacific students in this study?
- Do students know what they want to achieve?
- Do students know how to achieve their career aspirations and expectations?
- What support is available to help students achieve their career aspirations and expectations?
- Discussion
- Conclusion and implications.

3 | *What is the profile of Pacific students in this study?*

This section provides a demographic profile of the Pacific students who took part in the cohort study. The comparisons confirm the profile of respondents is broadly consistent with that of Pacific students across the whole Auckland region. Results for survey 3 were consistent with those of survey 1, where not stated otherwise.

3.1 | Gender and age

Gender representation across the three surveys remained consistent, with nearly equal proportions of female and male students. In survey 3, 50% of respondents were female and 50% were male students with a mean age of 15.4 years.

3.2 | Ethnicity

3.2.1. All identified ethnicities

As in surveys 1 and 2, the majority of students in survey 3 (Year 11) identified with Samoan (59%), Tongan (32%), Cook Island (18%), New Zealand European (18%), Māori (12%) and other (5%) ethnic groups (table 3). As in the two previous surveys, half (50%) of the students identified with one ethnicity, while the remaining students most commonly identified with two (32%) or three (12%) ethnicities.

3.2.2. Self-prioritised ethnicity

Self-prioritised ethnicity remained consistent over the three surveys, with the majority of students prioritising Samoan, Tongan, Cook Island, New Zealand European and Māori ethnic groups (table 3).

Table 3: Ethnicity of students who responded to survey 3

Ethnicity	*Self-prioritised ethnicity – survey 3 (%)*	*All ethnicities – survey 3 (%)*
Samoan	43	59
Tongan	24	32
Cook Island	11	18
NZ European	6	18
Māori	4	12
Niuean	5	10
Other	2	5
Fijian	2	6
Fijian Indian	1	2
Tuvaluan	0.5	2
Tokelauan	0.4	2
Kiribati	0.4	1
Tahitian	0.6	4

3.3 | *Culture and identity*

Students were asked questions about their culture and identity in all three surveys. The majority of students consistently indicated high levels of pride in their Pacific culture, placed high importance on cultural values and identified that it was important to be recognised as a person from their own cultural group. Similar to findings in survey 1 (Year 9), most students in survey 3 could understand (71% and 76% respectively[11]) and could speak (61% and 60% respectively) their Pacific culture's spoken language.

3.4 | *Religion*

The majority of students were affiliated with a religious denomination (94%), and 70% attended church on a weekly basis.

3.5 | *Group associations*

In each of the three surveys, most students were involved in extra-curricular group activities. In survey 3, almost all students (87%) were members of at least one group. The highest proportion of students was involved in church or sports groups (table 4).

Table 4: **Participation in different groups for respondents from each survey**

Group association	Survey 1 (%)	Survey 2 (%)	Survey 3 (%)
Church	63	65	68
Sports	53	56	53
Arts and/or drama	11	14	15
Cultural group	23	27	26
None	Not asked	14	12
Other	5	3	5

3.6 | *Intergenerational and parental demographics*

3.6.1. Household composition

Around two-thirds of students (67%) lived with both of their parents at the time of survey 3, consistent with the results of surveys 1 and 2. More than one-quarter of students lived with one parent (26%) and a smaller proportion (7%) lived with neither of their parents. Some students also lived with their extended family including grandparents (15%), cousins (7%) and aunties (9%).

3.6.2. Parental employment and educational status

Many students did not know their parents' highest level of education (63%). The majority who did, reported that their parents had a university degree (14%), followed by a secondary school qualification (10%), trade or national certificate (6%), vocational diploma (5%) and completion of schooling up to the end of Year 10 (2%).

Nearly three-quarters of students indicated that at least one of their parents was in full-time employment (70%), followed by part-time (11%) and voluntary (0.5%) employment. Some students (10%) reported that neither of their parents worked.

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11   Percentages provided are combined totals of 'very well', 'well' and 'fairly well' categories, unless otherwise stated.

Case study 1

J is a 15-year-old male student who identifies as a Christian. He also identifies as a Samoan New Zealander but aligns more with being Samoan. He is very comfortable in Samoan environments and speaks both English and Samoan well, though he mostly speaks Samoan at home. Both of his parents are in paid employment at the time of survey 3, though his father was unemployed at the time of survey 2.

J aspires to be a sports professional; to play for the rugby league team Storm. He had initially wanted to be a police officer or a physical education (PE) teacher, but his passion is to play for the Storm. J feels, though, that he may not be able to achieve this aspiration as he notes that he is "always being pressured to put school first". He subscribes, however, to the belief that putting school first and working hard at school will help students to achieve their aspirations. Furthermore, he believes self-belief is also important for helping students achieve their aspirations.

J notes that, within school, he respects his PE teacher and gets along with him. Overall, he thinks his teachers believe he can achieve in school and encourage him to do his best. It helps him to learn effectively and to focus in his class. His PE teacher also encourages him to do well in other subjects. J believes he is doing better in science than in maths and English, but he does not enjoy learning about it and is not interested in it.

J's school put him in a mentoring programme to help support his learning, as he was struggling with behavioural issues. He notes he was in this programme together with a group of boys. The programme encouraged them to raise their aspirations and to do well at school. J notes it was easy to get along with his mentor and to be encouraged.

J is aware that the school careers office provides support for career planning, but he does not use it. He also perceives that students can benefit from having someone with a similar background to encourage them to reach the same career goal that they have achieved. On the other hand, J believes that students need to take responsibility to motivate themselves and be their own role model.

He feels frustrated when he thinks about his career and finds it difficult to set career goals, in part because he finds it hard to relate his abilities to a career plan. In survey 2, he thought it was easy to discover the right career but, by survey 3, he strongly agrees it is difficult to do so. He no longer agrees that his parents can help him find information about careers. In spite of this, he has confidence in his ability to find information about careers and identify a career pathway.

J said his parents encourage him to do well at school but they are not involved in helping him with homework due to a language barrier. He notes his family and church help him to achieve by encouraging him, but he believes the onus on lifting his achievement is on himself.

J's father encourages him to have high aspirations, in particular, to go to university and to follow in his older sister's footsteps. He is mindful that, to achieve his dream, he will need to do what he wants but also keep in mind what his family wants. J stated his family helped him to consider different careers and courses that align with his career aspiration. While J aspires to a tertiary qualification, he only expects to achieve a secondary level qualification.

4 | *Do students know what they want to achieve?*

The following sections examine the education and career aspirations and attitudes toward career planning for the Pacific students surveyed.

4.1 | *Immediate post-school plans*

Most students reported they were planning to enter further training or education when they left secondary school (figure 1). This proportion increased between surveys 1 and 3, while the proportion of students planning to begin work or look for a job did not change significantly.

Figure 1: Students' plans for what they will do after leaving secondary school
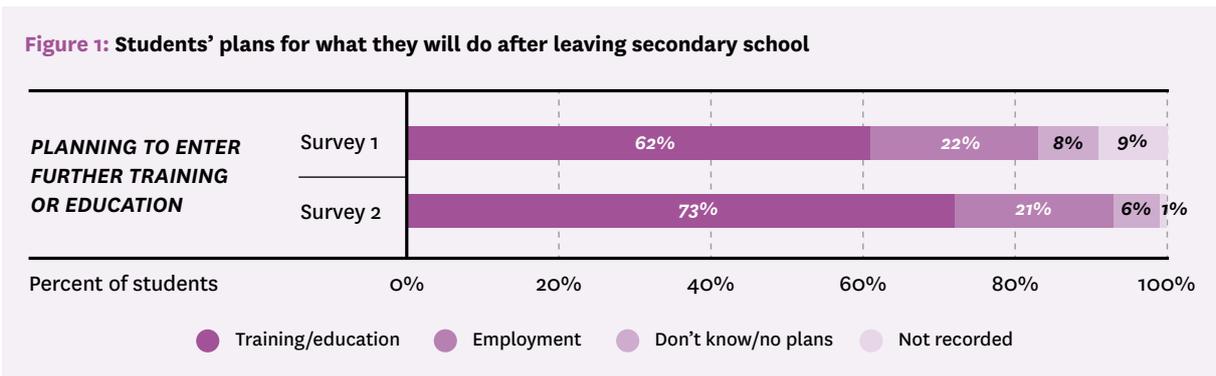
More than one-third of those students planning to enter employment upon leaving school, had yet to choose a career (37%) and more than a quarter felt worried about that (27%).

Students were also asked about their parents' expectations. The majority agreed or strongly agreed that their parents expected them to go to university (84%) but a high proportion also agreed or strongly agreed that their parents expected them to go to work after they left school (64%) (figure 2). Some students agreed that their parents expected them to go to university but not get a job when they left school (13%) but more commonly students agreed that their parents expected them to go to university and get a job (57%). Very few students agreed that their parents expected them to get a job but not go to university after school (3%).

Figure 2: **Students' agreement with statements in survey 3 about their parents' expectations for what they will do after leaving school**

	Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree
Expect me to go to work after school	6%	11%	19%	26%	38%
Expect me to go to University	2%	3%	11%	25%	59%

Percent of students
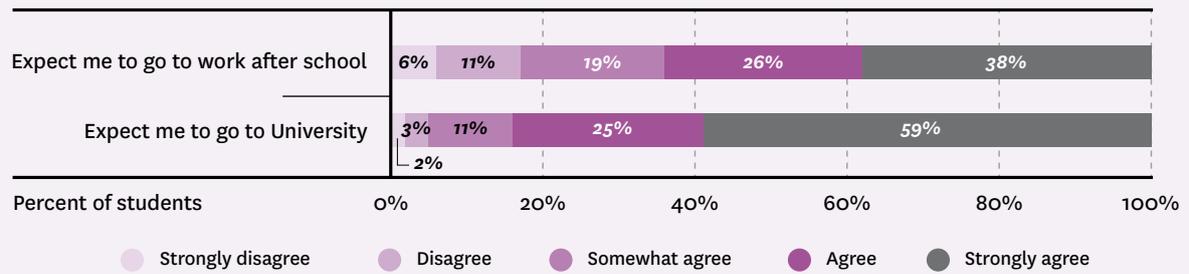
4.2 | *Career choice status*

Across all three surveys, a consistently high proportion of students indicated that they had not chosen a career. One-third of students who had chosen a career had not investigated it. The findings show little change over time in the proportion of students who had not made a career choice. Amongst those who had not made a career choice, around two-thirds reported feeling worried about not having chosen a career (figure 3).

Figure 3: **Career choice status for students in survey 3**

I have chosen a career:

I have investigated my career choice
66%

I have not investigated my career choice
34%

36%

64%

I have not chosen a career:

I am worried about it
62%

I am not worried about it
38%

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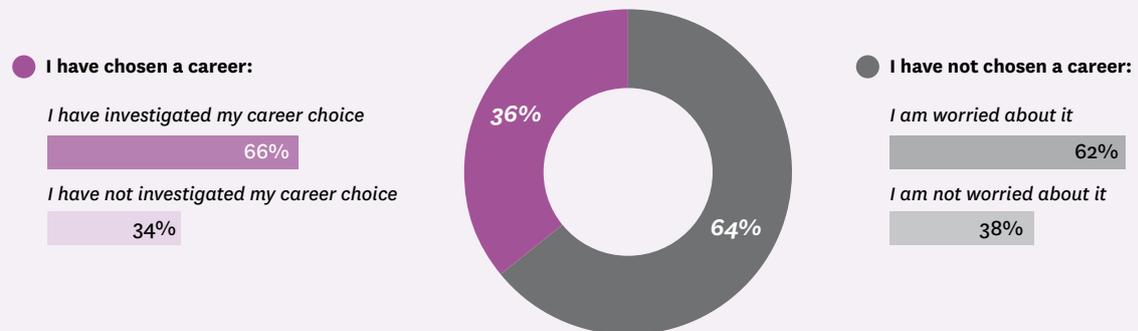
12   See Appendix 1 for further details.

Modelling career choice status

Based on regression modelling, students were more likely to have chosen a career if:[12]

- they were female
- they had higher exposure to non-Pacific cultures
- they had higher career confidence and lower career uncertainty
- their parents were involved and had high expectations
- their relatives were supportive and involved.

4.3 | Career aspirations and expectations

Students recorded what career they aspired to enter. As shown in figure 4, students most commonly aspired to professional careers. The proportion of students who aspired to community and personal services and sports professional careers decreased significantly between the surveys, and the proportion of students who did not know their career aspirations increased.

These findings suggest that as Pacific students' progress through the early years in secondary school their career aspirations become more uncertain. The findings also highlight the relatively small proportion of Pacific students in the survey who aspired to trades careers.

Figure 4: Students' career aspirations in surveys 1 and 3 (significant changes are marked by *)

Category	Survey 1	Survey 2
Professionals	39%	37%
Don't know*	20%	29%
Community and personal services*	20%	15%
Other	5%	7%
Trades	5%	4%
Sports professionals*	5%	2%
Arts and media professionals	2%	2%
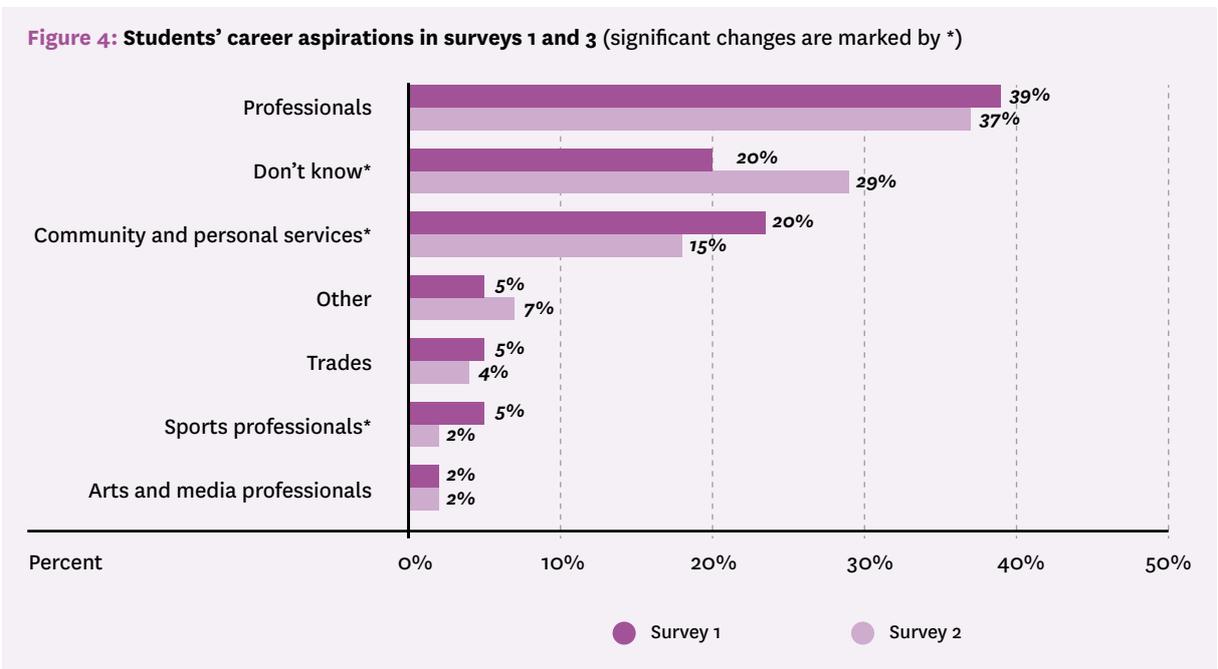
Students were also asked what careers they expected to enter. Half of the students (50%) in survey 3 did not know what career they expected to enter. Students who did know what career they expected to enter most commonly expected to become professionals, though the proportion decreased between surveys 1 and 3. The proportion of students who expected to enter community and personal services and sports professional careers also decreased (figure 5).

Figure 5: Students' career expectations in surveys 1 and 3 (significant changes are marked by *)

Category	Survey 1	Survey 2
Don't know*	33%	50%
Professionals*	32%	24%
Community and personal services*	20%	15%
Trades	5%	4%
Other	4%	3%
Arts and media professionals	2%	2%
Sports professionals*	4%	2%

Percent
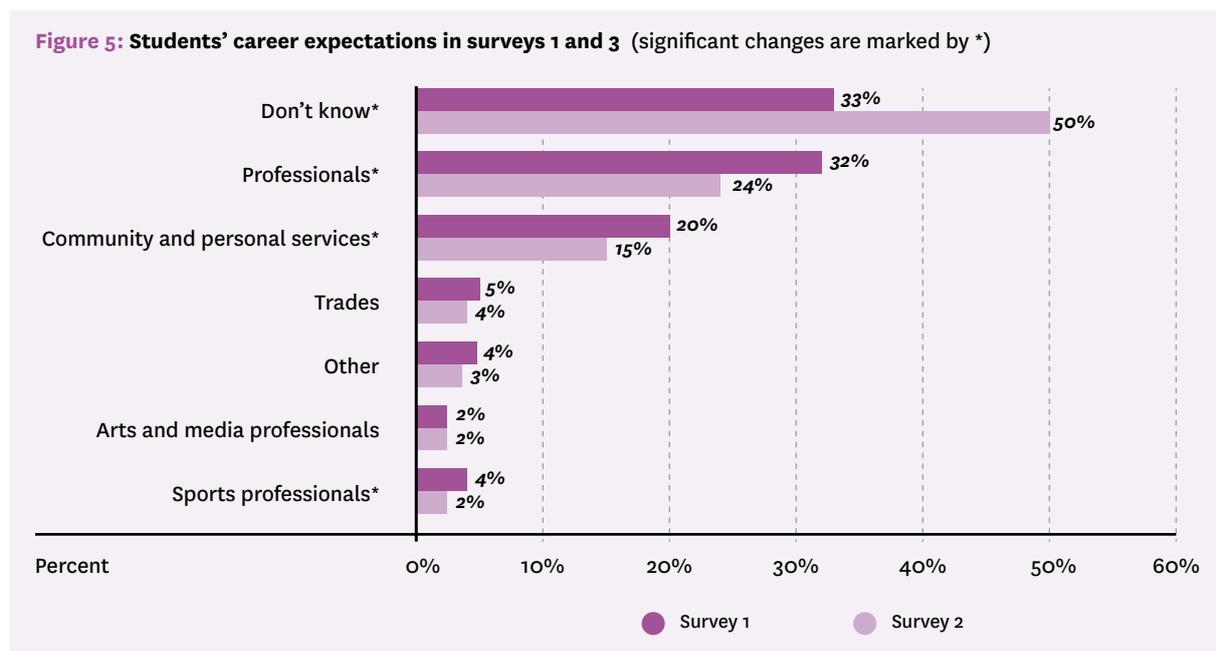
The proportion of students who answered that they did not know what either their career aspirations or expectations were increased between surveys 1 and 3 (figure 6).

Figure 6: Proportion of all students in surveys 1 and 3 whose career aspirations matched or did not match their expectations

CAREER ASPIRATIONS MATCHED STUDENTS' EXPECTATIONS	Match	Mismatch	Don't know
Survey 1	49%	16%	35%
Survey 3	37%	10%	53%

Percent of students
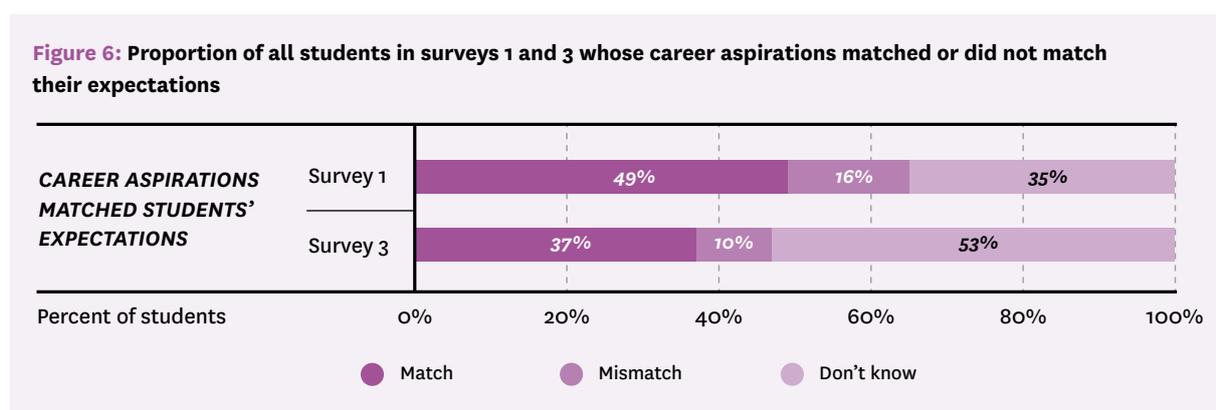
When comparing only those students who knew what both their career aspirations and expectations were, the proportion of students who matched was 80%.

In survey 3, students were more likely to have matching aspirations and expectations when they aspired to community and personal services careers. The lower proportion of students whose aspirations matched their expectations in the sports professional and art and media professional careers may indicate that students recognised the difficulty of entering careers in those areas (figure 7).

Figure 7: **Proportions of students whose aspirations matched or did not match their expectations by the different careers they aspired to in survey 3**
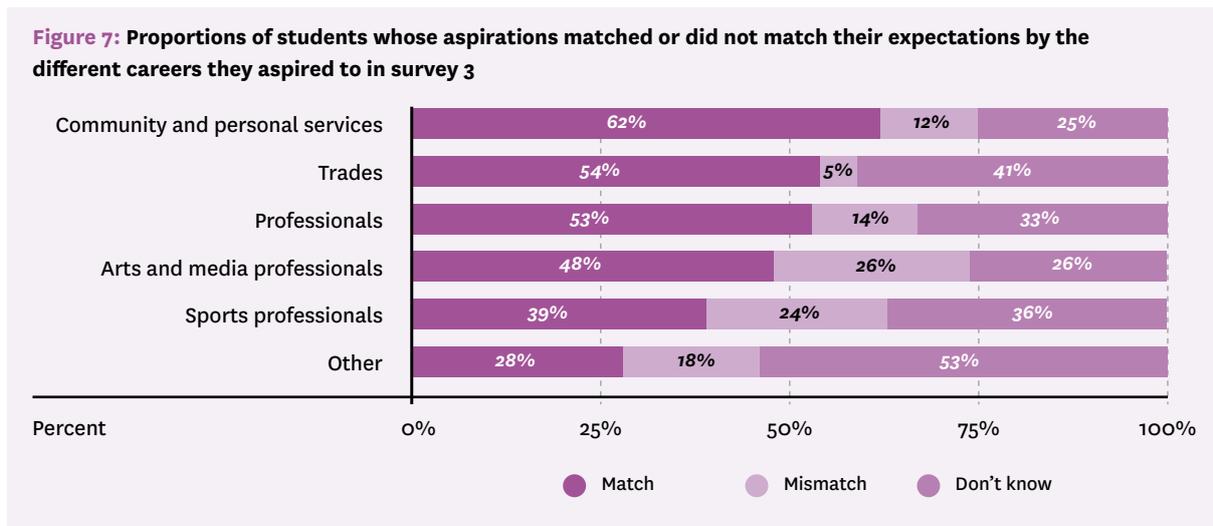
Based on regression modelling, students whose career aspirations matched their expectations were more likely to:[13]

- be male
- like school
- spend time with non-Pacific groups and be more familiar with New Zealand cultures
- have confidence in their career choice and skills.

4.4 | Education aspirations and expectations

Overall, many Pacific students did not expect to attain the level of education to which they aspired. In survey 3, just under half (49%) of students aspired to a tertiary degree qualification – a bachelor's degree, master's degree or doctorate (PhD). A smaller proportion of students aspired to other tertiary qualifications (18%) or secondary level (34%) qualifications. These findings are consistent with students' post-school plans (figure 1). Figure 8 shows students' educational aspirations.

The highest proportion of students aspired to a master's degree rather than a PhD or undergraduate degree. It is clear that many students would like to achieve an educational qualification at a higher level than a basic degree. A significant proportion of students also aspired to achieving university entrance but not to completing a degree-level qualification.

Between surveys 1 and 3, significantly fewer students reported aspiring to just a secondary level qualification. The proportion of students who aspired to trade or national certificate qualifications increased significantly (from 2% to 8%). While the proportion of students aspiring to a PhD decreased significantly (from 18% to 13%). This change was accompanied by significant increases in the proportion of students aspiring to master's (15% to 23%) and undergraduate degrees (5% to 12%).

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13   See Appendix 1 for further details.

Figure 8: **Students' educational aspirations recorded in survey 3**
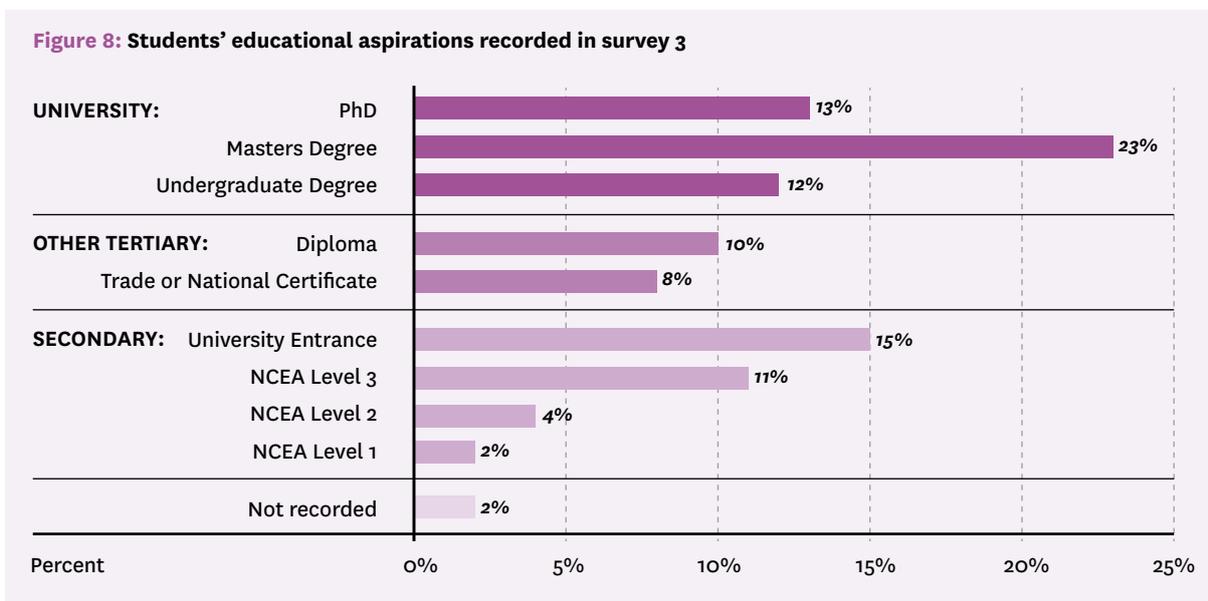
Figure 8: **Students' educational aspirations recorded in survey 3**

UNIVERSITY:	PhD	13%
	Masters Degree	23%
	Undergraduate Degree	12%
OTHER TERTIARY:	Diploma	10%
	Trade or National Certificate	8%
SECONDARY:	University Entrance	15%
	NCEA Level 3	11%
	NCEA Level 2	4%
	NCEA Level 1	2%
	Not recorded	2%

Students were also asked to record what level of education they expected to achieve (figure 9). Students were also asked to record what level of education they expected to achieve (figure 9).

Figure 9: **Students' educational expectations recorded in survey 3**

UNIVERSITY:	PhD	6%
	Masters Degree	13%
	Undergraduate Degree	10%
OTHER TERTIARY:	Diploma	9%
	Trade or National Certificate	8%
SECONDARY:	University Entrance	19%
	NCEA Level 3	21%
	NCEA Level 2	7%
	NCEA Level 1	4%
	Not recorded	2%
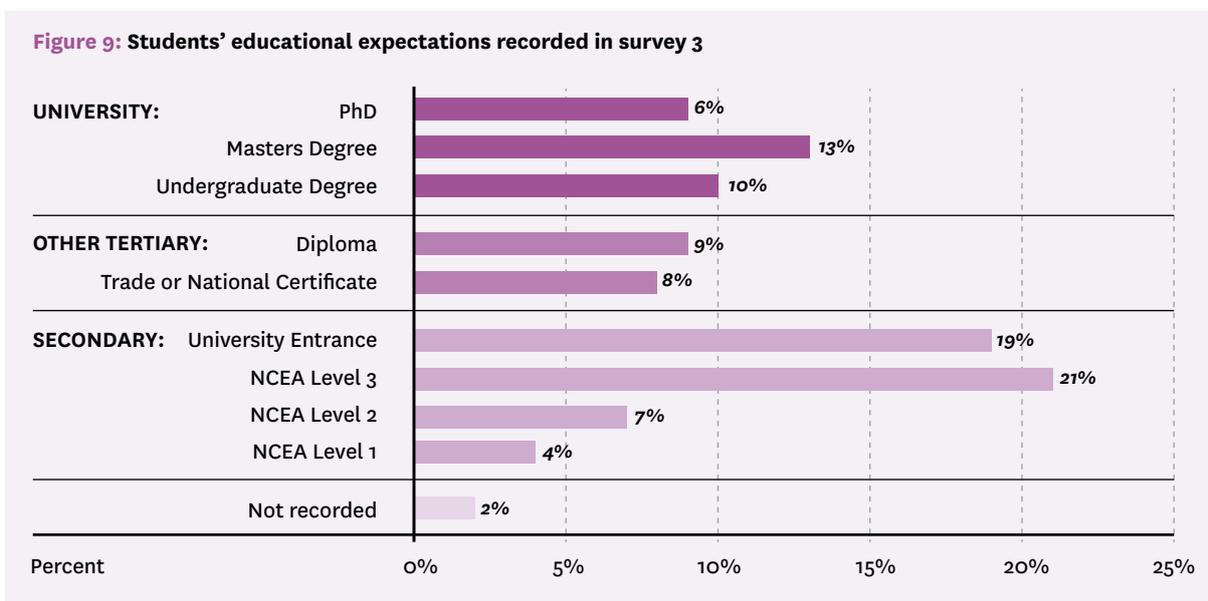
Students' education expectations differed markedly from their aspirations. Overall, 42% of students who aspired to a university qualification did not expect to achieve one. Similarly, 47% of students who aspired to a non-degree tertiary qualification did not expect to achieve one. Table 5 shows how students' education aspirations matched their expectations. At all levels, from secondary to tertiary, high proportions of students did not expect to achieve aspirations. More than half of students aspiring to any level of education beyond NCEA level 3 did not expect to achieve their aspirations.

Table 5: **Students' education expectations by their educational aspirations**

			Education expectations							
	%	PhD	Master's	Under-graduate	Diploma	Trade/ National Certificate	UE	NCEA level 3	NCEA level 2	NCEA level 1
Education expectations	PhD	42	21	6	7		8	7		
	Masters		45	11	11	5	15	9		
	Undergrad		6	44	14	7	21	7		
	Diploma				40	12	23	12	5	
	Trade/ National Cert					48	20	19	6	
	UE				5		42	31	7	6
	NCEA level 3						9	61	18	5
	NCEA level 2						6	14	57	19
	NCEA level 1							11	17	62

Purple cells: Aspirations exceeded expectations

Note: Each row displays what level of education students with each aspiration expected to achieve. For example, the top-left cell shows that 42% of students who aspired to a doctorate (PhD) expected to achieve one. The top cell in the university entrance (UE) column shows that 8% of students who aspired to a PhD expected to achieve UE. All cells with values under 5% have been hidden.

Modelling education aspirations and expectations

Students' expectations were more likely to match their aspirations when:
- they were female
- they had confidence in their ability to do well at high school
- they had good relationships with their teachers
- they had higher career confidence and lower career uncertainty
- their relatives were supportive and involved.

Case study 2

S is 15 years old and identifies as Samoan. He is bilingual (English and Samoan). He spends most of his time in Samoan cultural settings and is very comfortable in them. He speaks Samoan at home and can understand it and speak it well. His culture is very important to him, and he is proud to be Samoan. He is equally proud, however, of being a New Zealander and has a lot of non-Pacific friends.

S reported in interviews that he aspires to be a sports professional – in particular, a rugby player. His interest in rugby comes from his passion to do something he enjoys. In addition, S also wants to pursue a career in music. In Year 10, S had indicated he wanted to be lawyer; however, this changed as a result of his awareness of what was involved in pursuing that career. S noted he had reflected on himself and realised his qualities did not suit this career, instead, he focuses on music as his other career aspiration.

While thinking about his career excites him, he does not understand how his interests relate to work, and he does not have a career plan. He is less confident that he knows who to talk to about his career now than when he was in Year 10. Despite the expressions of interest in future career options, S reported in the survey that he has not yet chosen a career.

S's main motivation in choosing his subjects was his own personal interests. The subjects S is taking are maths, English, music, physical education (PE), health and PE, and science. S notes that maths and English are compulsory subjects. He is doing well in both and enjoys learning them. The reason for taking music is because he is good at it and it is an easy credit to gain. He took PE and health and PE because of positive previous experience. He takes science because he wants to challenge himself this year and he would like to achieve NCEA level 1 science. While he is interested in learning about it, he doesn't believe he's doing well.

S notes that the main influence for his career decisions is his parents. His father, in particular, influenced him to aspire towards rugby while his mum influenced him to aspire to a career in music. While these aspirations had initially been his parents' interests he has now adopted them as his own. He also said that, as an older sibling, he wants to set a good example by respecting his parents and listening to their advice. He feels his desire to respect his parents affects his learning by helping him to improve his attitude and keep focused.

S's parents expect him to do well in school. He notes that his parents expect him to go to university after school. He believes they do not have a clear understanding of the subjects he needs to take to achieve his goals.

Within school, S indicates he gets along with his teachers and that they help and support his learning achievements. He strongly believes they support him, care for him and expect him to do well in school. He encourages students to take subjects that will help them with their future rather than taking subjects because their friends are taking them.

He believes a mentoring programme that involved aspiring Pacific Islanders (such as rugby players) sharing their journeys would help to motivate students. He believes that sharing stories would help to equip students with real-life examples about how to gain the career they aspire to achieve.

5 | *Do students know how to achieve their career aspirations & expectations?*

Key points

- Students reported high levels of confidence and positivity in their career skills, though confidence decreased between surveys 2 and 3.
- Students' education expectations often did not match the level of qualifications required by their career expectation.
- Students most commonly chose their subjects because of personal interest. While many took advice from family and school staff about career choices, few students chose their subjects because of that advice.
- Almost one-quarter of all students in survey 3 did not know if they were taking the right subjects for what they wanted to do when they left school.
- Over one-third of students did not know if their school ran an academy.
- The proportion of students who reported that no one helped them choose their subjects decreased between surveys 1 and 3. A high proportion of students, however, did not receive help in choosing their subjects at an important point in their education.
- When compared with science and maths, more students strongly agreed that taking English would enable them to do many different types of careers, better prepare them for university and help them to achieve their future goals, and they were determined to use their English knowledge in their future careers.

5.1 | *Career planning (exploring career pathways)*

Students were asked about their confidence and perceived skills in different aspects of career planning and knowledge. Figure 10 shows students' level of agreement with statements about their skills and attitudes in career planning. Most students agreed or strongly agreed with each response. Students were least likely to agree or strongly agree that career planning is a natural activity.

Figure 10: **Students' agreement in survey 3 with different statements about their career skills and knowledge**
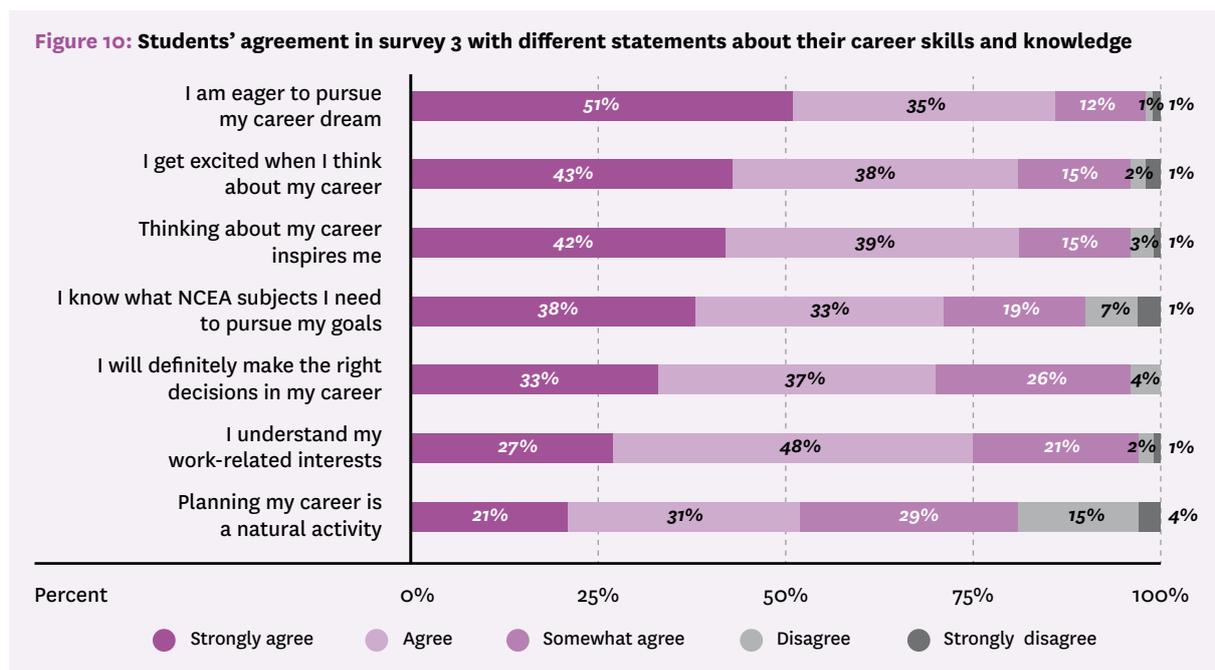
The proportion of students who strongly agreed with each of the statements about their career skills and knowledge was significantly higher in survey 3 than survey 1. All positive changes were, however, between surveys 1 and 2 (table 6).

Table 6: **Proportion of students who strongly agreed with each statement in survey 1 and the change between surveys 2 and 3**

Statement	Survey 1 baseline (%)	Surveys 1–2 change (%)	Surveys 2–3 change (%)	Surveys 1–3 overall change (%)
I am eager to pursue my career dreams	36	+18	–3	↑ +15
I get excited when I think about my career	28	+20	–5	↑ +15
Thinking about my career inspires me	30	+19	–7	↑ +12
I will definitely make the right decisions in my career	29	+15	–11	↑ +4
I understand my work-related interests	15	+18	–6	↑ +12
Planning my career is a natural activity	14	+11	–4	↑ +7

Note: Significant changes (p < 0.05) are bolded. The question about NCEA subjects in Figure 10 is excluded from this table as it was only asked in survey 3.

Students were also asked whether they agreed or disagreed with a series of statements about their attitudes towards career planning. Many students strongly disagreed or disagreed with these statements indicating they felt frustration, difficulty and uncertainty around career planning (figure 11). While these findings do not directly contradict the positive statements they do suggest uncertainty.[14]

Figure 11: **Students' agreement with different statements about their attitudes towards career skills and knowledge from survey 3**

Statement	Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree
It is easy to discover the right career	8%	12%	21%	33%	25%
I am sure of my future career success	6%	14%	28%	31%	21%
It is easy to relate my abilities to a specific career	6%	13%	24%	36%	20%
It is easy for me to set career goals	6%	13%	26%	34%	22%
Thinking about my career does not frustrate me	12%	22%	23%	24%	19%

Percent — 0%, 25%, 50%, 75%, 100%

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14   It is important to note that these questions have been inverted for analysis: students were asked if they agreed or disagreed with negative statements (for example, it is hard to discover the right career). The way these questions were asked may have influenced how students responded.

Students' responses to the questions about their attitudes towards career planning changed between surveys 1 and 3, as well. Table 7 shows that only a small proportion of students strongly agreed with each statement in survey 1, and the proportion decreased between surveys 1 and 2.

Table 7: **Proportion of students who strongly agreed with each statement in survey 1 and the change from surveys 1 to 2 and 2 to 3, as well as the overall change from survey 1 to survey 3**

Statement	Survey 1 baseline (%)	Surveys 1–2 change (%)	Surveys 2–3 change (%)	Surveys 1–3 overall change (%)
It is easy to discover the right career	13	−5	0	↓ −5
I am sure of my future career success	13	−5	−2	↓ −7
It is easy to relate my abilities to a specific career plan	12	−5	−1	↓ −6
It is easy to set career goals	13	−7	0	↓ −6
Thinking about my career does not frustrate me	18	−6	0	↓ −6

Note: Significant changes (p < 0.05) are bolded.

Students were also asked how confident they were with different career competencies. Most felt confident or very confident in each career competency (figure 12). However, 14% to 33% of students said they were not very or not at all confident, suggesting more support is required in some career competencies.

Figure 12: Students' confidence in career skills in survey 3
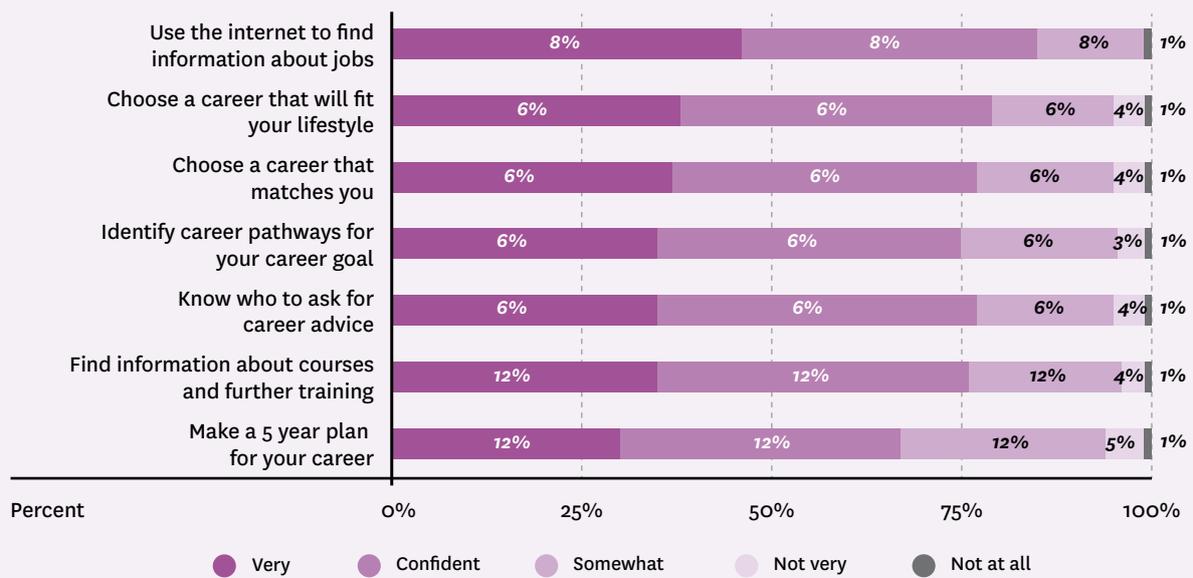
While students' confidence in career skills increased overall between surveys 1 and 3, confidence in nearly all areas decreased between surveys 2 and 3 (table 8).

Table 8: Proportion of students who were very confident with each career skill in survey 1 and the change from surveys 1 to 2 and 2 to 3, as well as the overall change from survey 1 to survey 3

Statement	Survey 1 baseline (%)	Surveys 1–2 change (%)	Surveys 2–3 change (%)	Surveys 1–3 overall change (%)
Use the internet to find information about jobs	37	+8	+2	↑ +10
Choose a career that will fit your lifestyle	31	+14	−7	↑ +7
Choose a career that matches you	35	+10	−8	↑ +7
Know who to ask for career advice	31	+10	−6	↑ +5
Find information about courses and further training	32	+9	−6	↑ +3
Make a five-year plan for your career goals	28	+8	−6	▬ +2

Note: Significant changes (p < 0.05) are bolded. The question about NCEA subjects in Figure 10 is excluded from this table as it was only asked in survey 3.

Note: Significant changes (p < 0.05) are bolded. Note that 'identifying career pathways for your career goal' was only asked about in surveys 2 and 3, where the change was a significant decrease from 41% in survey 2 to 35% in survey 3.

The findings demonstrate that, while students are generally positive about their skills, attitudes and knowledge of career planning, many also report experiencing frustration and having difficulty with this. While most students agreed or strongly agreed that they will definitely make the right decisions for their careers, more than half were uncertain of their future success.

5.2 | Academies

In surveys 2 and 3, students were asked whether their schools ran academies. The answers between surveys did not change significantly. In both surveys, over one-third of students indicated they did not know if their school ran an academy, demonstrating a lack of knowledge of the possible pathways available to them in the senior school. Of students who stated that their school had an academy, nearly half (49%) reported that their school had a sports academy and more than one-third (38%) a service academy (figure 13).

Figure 13: **Proportion of students who reported that their school had an academy (and if their school had an academy what type) in survey 3**

● My school has no academy

● I don't know

● My school has an academy. What type?

Sports 49%
Service 38%
Health sciences 27%
Trades 19%
Don't know 8%
Other 3%
Arts 2%

14%

49%

37%
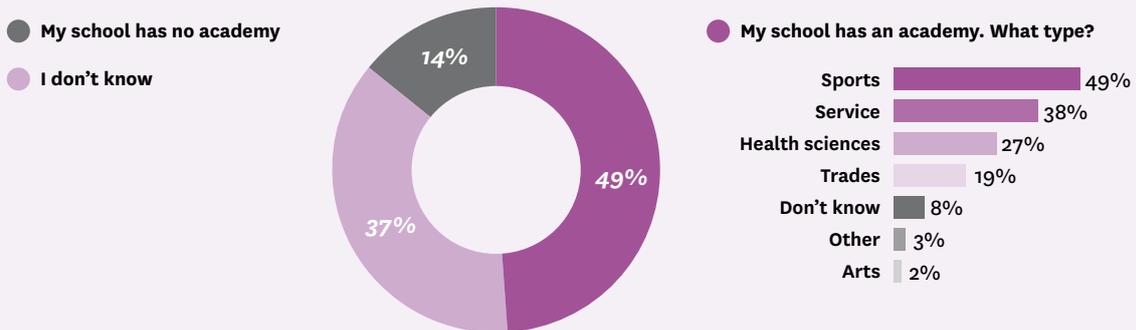
5.3 | Do students know what qualifications match their career aspirations and expectations?

A high proportion (73%) of students was planning to continue on to further education and training when they left secondary school (see section 4.1).

Figure 14 shows students' education and career aspirations. Students with career aspirations falling into the 'other' category contained the highest proportion of students who aspired to a tertiary qualification. Students who aspired to sports professional or community and personal services careers were most likely to aspire to a secondary school qualification.

Figure 14: **Students displayed by their career and education aspirations in survey 3**

CAREER ASPIRATIONS

Other: 5% 9% 8% 3% 5% 15% 27% 28% 1%
Professionals: 2% 6% 12% 5% 9% 13% 32% 18% 1%
Arts and media: 9% 17% 26% 4% 43%
Sport professionals: 12% 12% 28% 4% 12% 32%
Don't know: 4% 5% 13% 16% 6% 9% 15% 16% 11%
Trades: 12% 16% 32% 4% 7% 19% 9%
Community and personal: 3% 9% 19% 23% 13% 15% 4% 11% 3%

Percent: 0% 25% 50% 75% 100%

● NCEA 1 ● NCEA 2 ● NCEA 3 ● UE ○ Trade/National Cert
● Diploma ● Undergraduate ● Masters ● PhD
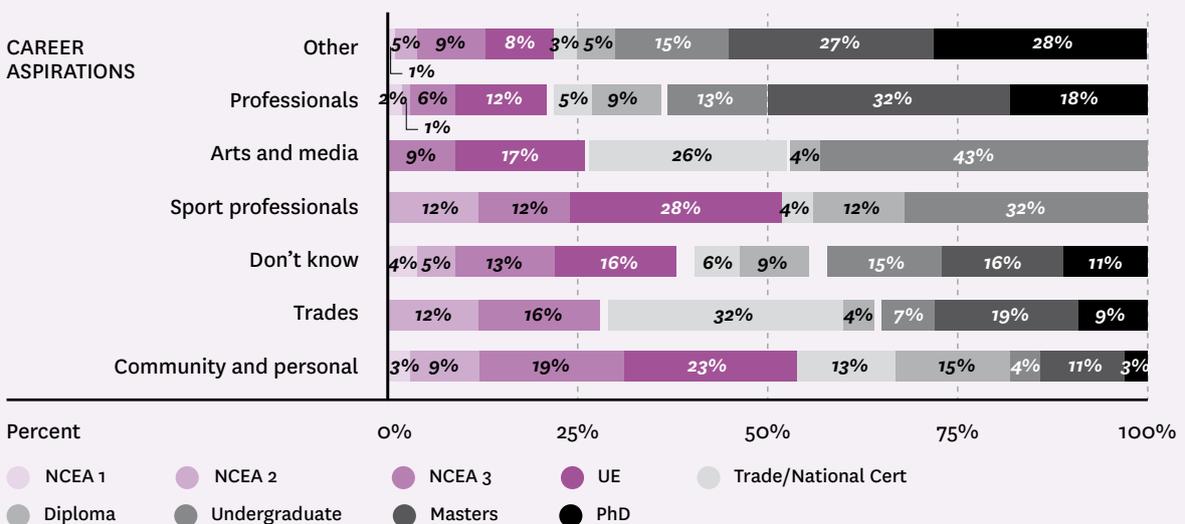
Note: Percentages smaller than 5% are suppressed. UE = university entrance; PhD = doctorate.

Students' expectations were generally lower than their aspirations. Figure 15 shows that a high proportion of students expected to attain secondary school qualifications across all career expectations.

Figure 15: **Students displayed by their career and education expectations in survey 3**

CAREER EXPECTATIONS									
Other	7%	23%	20%	7%	20%	13%	10%		
Professionals	3%	11% 1%	18%	7%	11%	12%	23%	14%	
Arts and media	8%	26%	8%	13%	14%	31%			
Sport professionals	10%	16%	25%	10%	11%	10%	19%		
Don't know	4%	7%	25%	20%	6%	10%	9%	9%	5%
Trades	27%	16%	10%	18%	10%	8%	11%		
Community and personal	10%	13%	25%	20%	13%	5%	3%	9%	1%

Percent: 0% 25% 50% 75% 100%

● NCEA 1   ● NCEA 2   ● NCEA 3   ● UE   ● Trade/National Cert
● Diploma   ● Undergraduate   ● Masters   ● PhD

Note: Percentages smaller than 5% are suppressed. UE = university entrance; PhD = doctorate.

5.4 | *Choosing subjects*

As reported in section 5.1, a high proportion of students agreed (33%) or strongly agreed (38%) that they knew the right NCEA subjects they needed to study to be able to pursue their career goals. However, nearly one-third of students said that they were not taking the right subjects for what they wanted to do when they left school (9%) or they did not know if they were taking the right subjects (23%).

Students were asked to record the reasons why they chose each of their subjects. In survey 3, after excluding compulsory subjects, the most common reason was personal interest (figure 16). Few students most commonly chose their subjects because of family, teacher or career counsellor suggestion. Only a small proportion chose any subjects based on teacher or career counsellor suggestion (1%) or family suggestion (2%). Nearly one-third of students (32%) chose at least one subject for career or other reasons.

Figure 16: **Most common reason for choosing subjects (excluding compulsory) in survey 3**

Personal interest	8%
Needed for future career	6%
Other	6%
Family suggestion	6%
Teacher/career counsellor	12%

Percent: 0% 25% 50% 75%
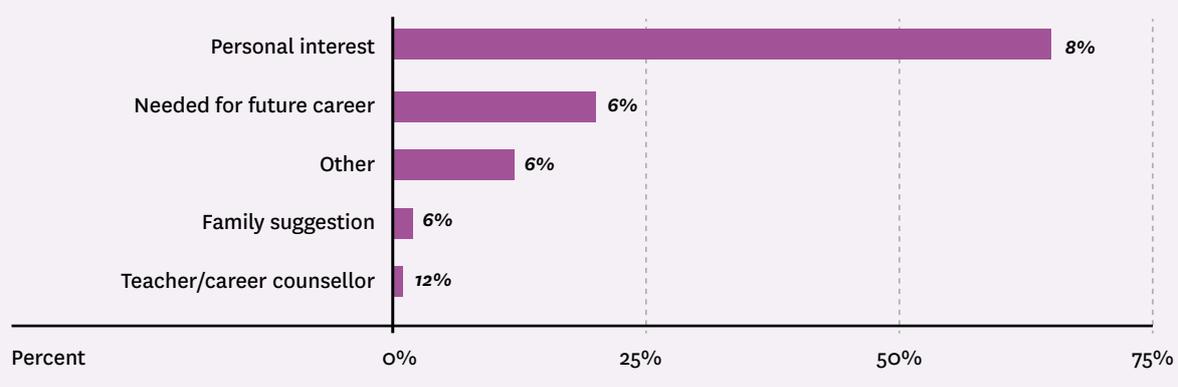
Although few students said the main reason for choosing their subjects was advice from family or adults at school, a higher proportion reported being helped by those adults. In survey 3, the proportion reduced significantly to just under half (47%, $p < 0.05$), though more students said they had received help from their family or from career counsellors or teachers at school (table 9). Most students in survey 3 agreed or strongly agreed that their parents had a good understanding of the subjects students needed to take at school to achieve their career goals, suggesting they were confident in their parents' ability to advise them on subject selection.

Table 9: **People students said helped them choose their subjects in surveys 1 and 3**

Help choosing subjects from:	*Survey 1 (%)*	*Survey 3 (%)*	*Surveys 1–3 overall change (%)*
No one	56	47	↑ -9
Family	34	44	↑ +10
Teachers and career counsellors	10	28	↑ +18

Note: Significant changes ($p < 0.05$) are bolded. Respondents were able to select more than one option.

While the proportion of students who reported that no one helped them choose their subjects reduced between surveys 1 and 3, nearly one-half (47%) did not receive help in choosing their subjects at an important point in their education.

Compared with students who had help choosing their subjects, students who did not receive help were significantly ($p < 0.05$):

- less likely to strongly agree that they knew what NCEA subjects they needed to pursue their career goals (42% compared with 35%)
- more likely to want to start work after leaving school (25% compared with 17%)
- less likely to want to continue to further training or education (66% compared with 72%)
- more likely to have no plans or not know what to do after leaving school (7% compared with 4%).

5.4.1. The core subjects: maths, science and English

Students in survey 3 were asked about their thoughts on the value of each of the three core subjects for their future plans. The majority of students agreed or strongly agreed with each statement for each subject. However, comparing the proportion who strongly agreed highlights differences between the subjects (figure 17). Students were most likely to strongly agree that English enables career options, university study and achieving future goals. The most marked difference between subjects was in whether students intended to enter a career that uses the subject. More than half (58%) of students intended to enter a career that uses English, while around one-third intended to enter a career using maths (33%) or science (36%).

Figure 17: Proportion of students who strongly agreed with statements about each of the three core subjects in survey 3
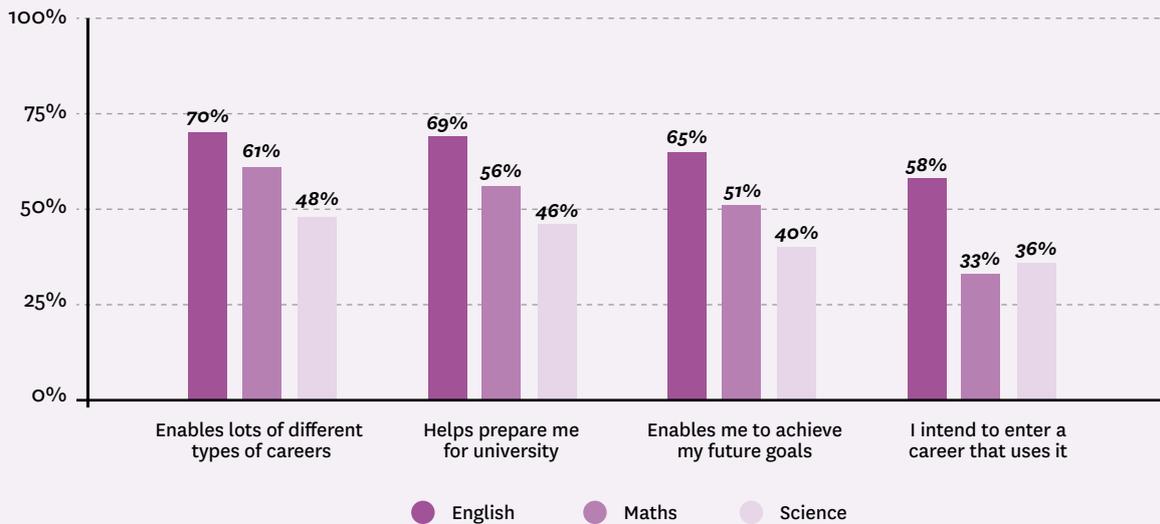
Students in survey 3 were also asked whether they thought their family and friends would be pleased if they got good grades in each subject. Students were most likely to strongly agree that both their family and friends would be pleased if they achieved good grades in English (78% and 52% respectively) (figure 18). The findings suggest that, like the students themselves, students' families also value English most highly.

Figure 18: Proportion of students who strongly agreed that their families and friends would be pleased if they got good grades in each of the three core subjects (survey 3)
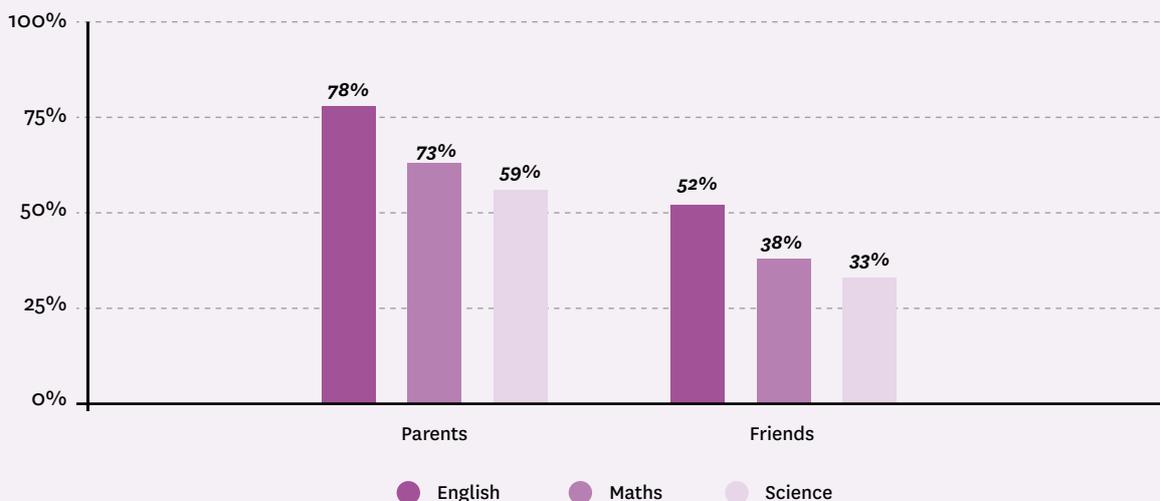
5.4.2. School achievement

Nearly three-quarters (73%) of students agreed or strongly agreed that they were confident of doing well in secondary school. More than half of students (57%) felt that their grades fell in the middle of their class relative to the other students (figure 19).

Figure 19: **Where students reported their grades sit relative to the other students in their classes in survey 3**
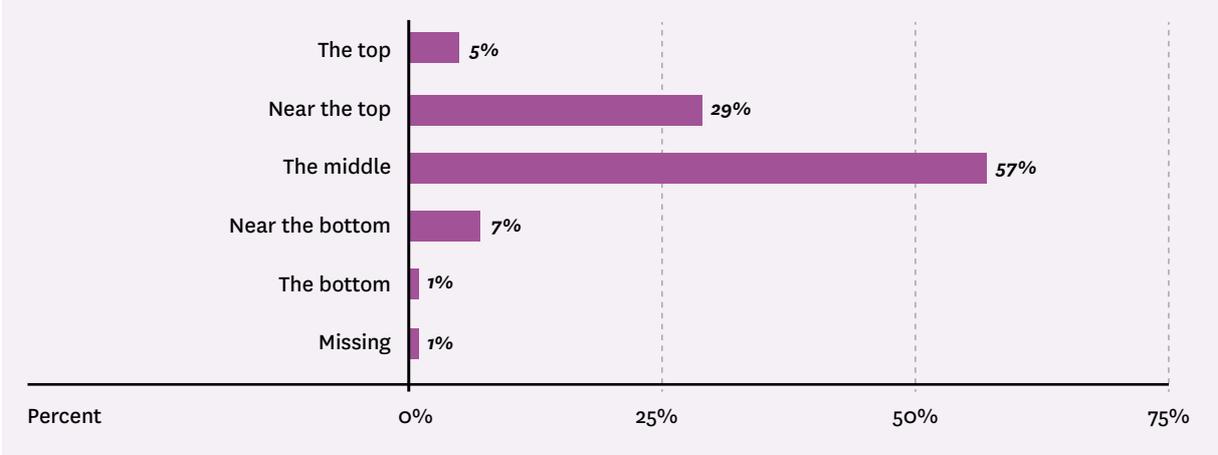
Modelling school confidence

Regression modelling of students' school confidence suggested that students were more likely to report feeling confident in their ability to do well in school when:

- they were male
- they liked school
- they had a good understanding of their own culture
- they were exposed to non-Pacific cultures
- they had confidence in their career skills
- their parents were involved in their schooling and had high expectations.

Case study 3

T is 14 years old and of Samoan and Tongan descent, however, she identifies as Samoan. She attends a Catholic church and while she reported in interviews that she speaks both English and Samoan fairly well, in her survey she recorded that she doesn't speak Samoan very well. She is very proud of her culture, and its values are very important to her but she doesn't believe she was brought up in her culture's way.

T aspires to a career in media. In particular, she would like to be a set designer for a movie. She also has an interest in acting, however, this is peripheral to set designing. She understands that there is a lot of competition in her career of interest but she is determined to pursue this career path. She is inspired when she thinks about her career, however, she finds it difficult to set her career goals and has difficulty relating her interests to a career plan. T is confident in that she knows who to ask for career advice and how to find information and that she will put together a career plan for the next five years. Despite the strong career aspiration, she does not expect to achieve her goal.

T is currently taking photography, design, health, drama and dance. She believes that these subjects "tie into each other" and will help her to achieve her career aspiration. She aspires to a tertiary level qualification and reports that her parents strongly expect her to go to university after school, however, she expects to achieve only a secondary level qualification. She does not believe she is doing well in maths or science and does not enjoy learning about either, at least in part because she doesn't believe either will contribute to her future career. She is more positive about English, which she enjoys and believes will be needed in her career. Overall, she does not like school and does not think she is doing well.

Her main supporters outside of school are her mum and grandmother. They encourage her to work hard and believe she can succeed at school.

T notes that having a good rapport with teachers is essential for achieving at school. She is not as confident as many other respondents that her teachers believe she will do well in school, though she does agree that they expect her to work hard and push her to succeed. T indicated that her teacher helped her to focus on set designing through the learning modules in class and that she also learnt from her teacher's life experiences. She believes that students would benefit from having a support person (someone who they respect) who they can talk to about their aspirations and who can advise them of the right career pathway. Personally, she would like to have someone to aspire to in set designing to mentor her and motivate her to achieve her career goal.

She believes the best mentoring programme is a 'study buddy' programme that involves friends helping friends. She notes that getting alongside a friend who may be better in a subject can help to decipher hard concepts in a way that students can understand.

Outside of school she is involved in a dance group, and her dance teacher has given her the responsibility of teaching young students every Tuesday. This responsibility gives her an opportunity to develop leadership qualities. In addition, she has the opportunity to take on the responsibility of event management. Her responsibilities in the dance group are on a voluntary basis, however, there is an opportunity for her to gain paid employment after a year.

6 | *What support is available to help students achieve their career aspirations and expectations?*

Key points

- Students in survey 3 were confident that they knew who to ask for career advice.
- Higher proportions of students relied on others (mostly parents) outside of the school environment for career advice.
- Around one-third of students indicated that their fathers never or only occasionally listened to them and discussed their thinking about their future career, and around one-quarter never or occasionally discussed future employment or tertiary education with their fathers.
- More students relied on teachers and careers guidance counsellors for help and advice on their careers than they did for choosing what subjects they were taking.
- Students were very positive about their relationships with their teachers.

6.1 | *Who do students rely on for career advice?*

As noted in section 5.1, in survey 3 the majority of students (77%) reported they were confident or very confident that they knew who to ask for career advice. Students were asked who they were most likely to rely on for career advice. Students most commonly relied on their family (figure 20). A higher proportion of students said they relied on their mothers (65%) than their fathers (49%). Students were also more likely to rely on careers guidance counsellors and teachers for career advice than for subject choice advice (see section 5.1).

Figure 20: **Figure 20. Who students were most likely to rely on for careers advice in survey 3**
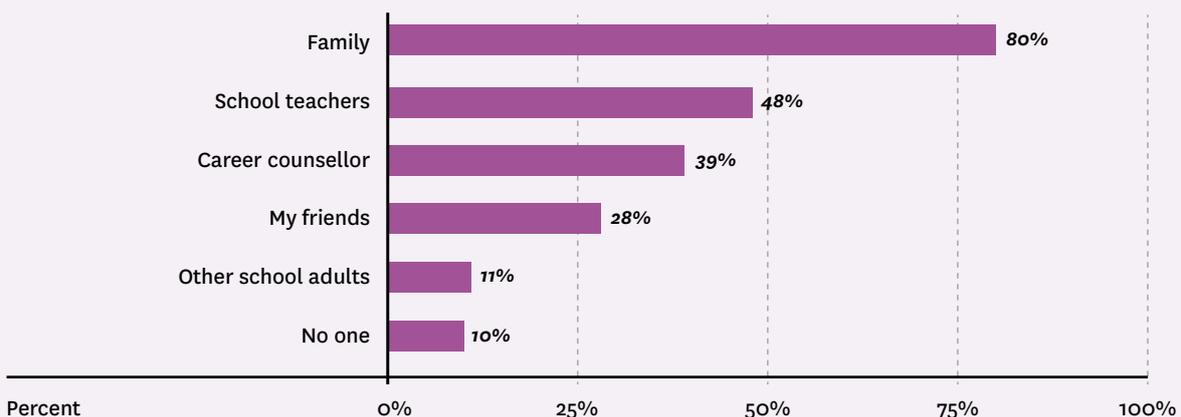
Note: Respondents were able to select multiple responses.

Most students agreed or strongly agreed that their parents and relatives were interested in their career choices and helped the students to find information for their career plans (figure 21).

Figure 21: **Students' agreement with their parents' and relatives' involvement in their career plans in survey 3**

HELP ME FIND
INFORMATION FOR
MY CAREER

Relatives — 11% | 20% | 25% | 41%
3%
Parents — 10% | 22% | 28% | 38%
2%

ARE INTERESTED
IN MY CAREER
CHOICES

Relatives — 3% | 16% | 30% | 50%
1%
Parents — 2% | 11% | 29% | 57%
1%

Percent of students

0% 20% 40% 60% 80% 100%

● Strongly disagree ● Disagree ● Somewhat agree ● Agree ● Strongly agree
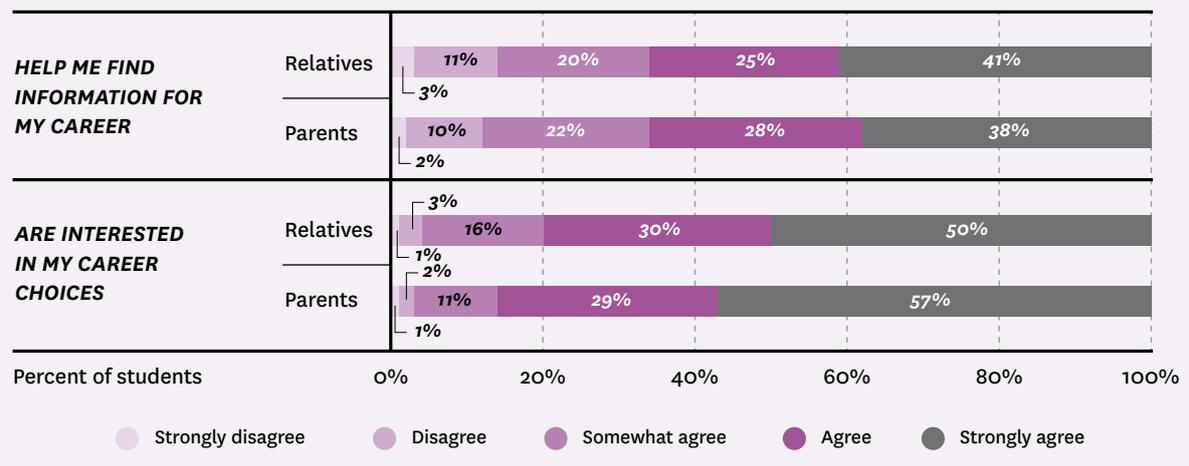
Around one-third of students felt that their parents always discussed the students' future employment or tertiary education. A high proportion of students reported that their fathers never listened to them or discussed their thinking around future employment and education. It is concerning that nearly one-third (29%) of students indicated that their fathers never or only occasionally listened to them discuss their thinking about their future career. Similarly, one-quarter (25%) of students never or occasionally discussed future employment or tertiary education with their fathers (figure 22).

Figure 22: **How frequently students discussed their future employment or education with their parents as reported in survey 3**

LISTEN TO YOU
DISCUSS YOUR
THINKING

Father — 16% | 13% | 38% | 33%
Mother — 7% | 11% | 41% | 41%

DISCUSS YOUR FUTURE
EMPLOYMENT OR
TERTIARY EDUCATION

Father — 12% | 13% | 39% | 36%
Mother — 5% | 14% | 45% | 36%

Percent of students

0% 20% 40% 60% 80% 100%

● Never ● Occasionally ● Sometimes ● Always
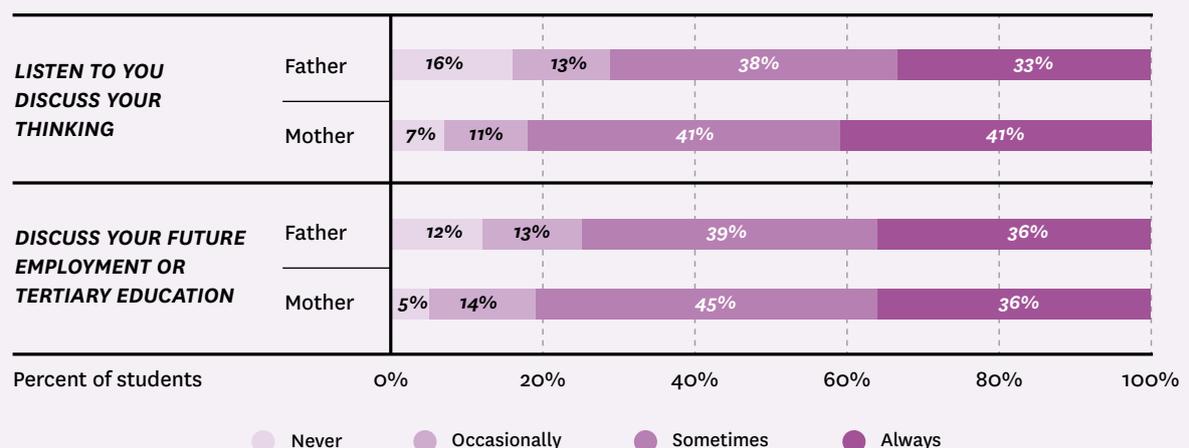
Note: This table excludes all students who reported that they live with their mother or father only, or with their mother or father and a male or female guardian only.

Almost half (48%) of the students in survey 3 indicated that they also rely on their teachers, and to a lesser extent career guidance counsellors (39%), for careers advice. In survey 3, most students agreed or strongly agreed that their teachers supported their goals for the future, answered questions about career issues and showed an interest in career plans (figure 23).

Figure 23: **Students' agreement with statements that their teachers supported their goals for the future**
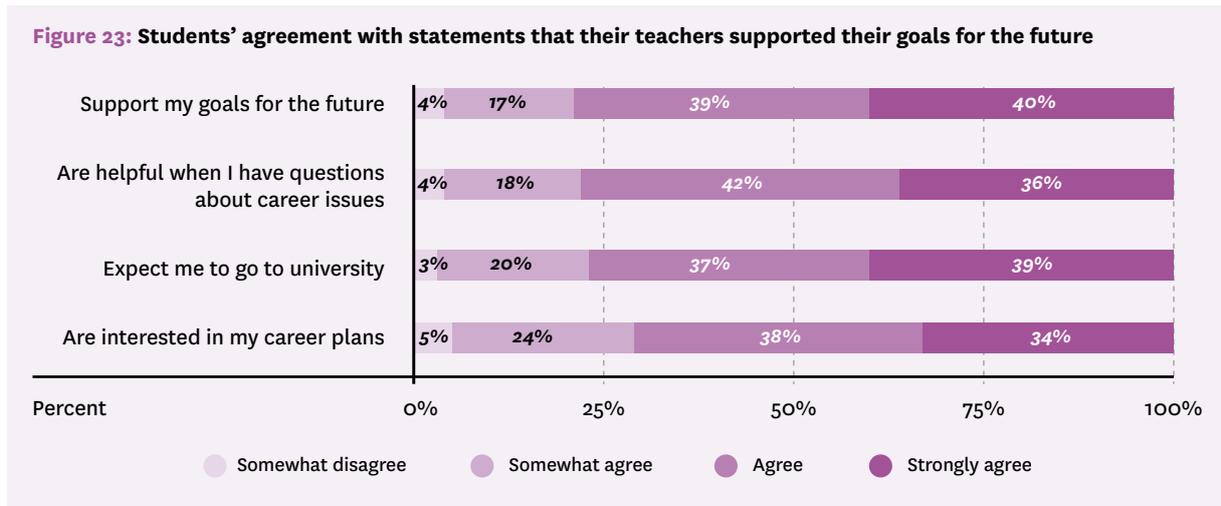
Students in survey 3 were also very positive about their teachers. The majority agreed or strongly agreed with each statement about their teachers (figure 24).

Figure 24: **Students' agreement with statements about their teachers in survey 3**
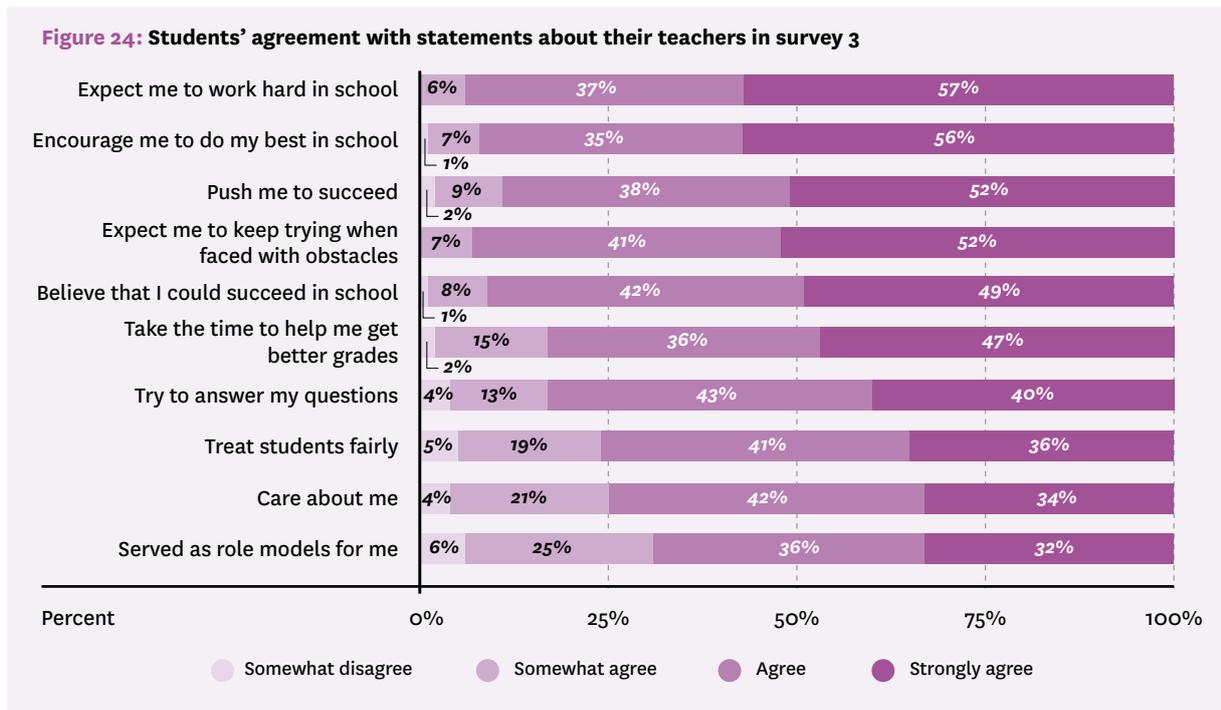
Case study 4

V is a 15-year-old female student who identifies as Samoan and American, though she aligns more with her American identity. She noted in her survey that she only spoke English very well. While she feels comfortable in Samoan cultural settings and is proud of being Samoan, she does not speak the language well. She is a Christian and lives with both of her parents, who are in paid employment and have tertiary qualifications.

V is very positive about her teachers and has become more so since survey 2. She thinks they believe in her, expect her to work hard and care about her. She is less sure that they expect her to go to university and that they take the time to answer her questions. V indicates that her music teacher inspires her to combine both her interests in music and travelling. She describes that her music teacher was in an orchestra and travelled all over Europe, and this inspires her.

She did not talk to anyone about which subjects to choose to study in Year 11 and chose them primarily out of interest. She does not enjoy learning about maths and does not want to enter a career that uses maths and does not think that learning maths will help her achieve her future goals. She does not take science, but does enjoy learning English and thinks she is doing somewhat well.

V aspires to have a career in music, in particular, to be a music engineer, and she believes she will achieve this goal. She notes that the main influence on her career choice is her own personal interest. V also has an interest in travelling and geography and learning about the world. While she has the support of her family and others she decided for herself what she wanted for a career. Her parents are interested in her career choices but they do not help her find information about her career options and they don't discuss her options.

She perceives that she can achieve her career goal by focusing on music at school and also by being committed to her piano lessons outside of school. V would like to get a university qualification and expects that she will achieve one.

V is more positive about her career skills than she was in survey 2. Thinking about her future career excites and inspires her, though she does find it difficult to relate her skills to a career path and feels less like planning a career is a natural activity than she did in survey 2. She is confident that she knows who to talk to about her career and where to find information, but is less confident she'll be able to choose a career that matches her skills, values and interests. She notes that the careers office is a resource to help students to choose their careers. V purports that, if students had more support from others around them, it could motivate them to raise their achievement and aspirations.

V believes that support at school is vital for helping students achieve their aspirations. At the same time, V believes that students need to take responsibility for their own learning. She notes that what would help her with her learning is to have interactive classes that are practical.

While V's parents don't help her with her homework, they support her to work hard, believe going to school is important and expect her to go to university. She perceives that older siblings as well as teachers can have a positive effect on their younger siblings. She notes that her parents are supportive and motivate her to achieve and reach her aspirations. In particular, she would ask her mum for help with English, but she notes her parents are more encouragers, rather than being able to help her with her school work.

7 | *Discussion*

This section identifies critical points of discussion from the key findings and outlines the relevant literature and current policy initiatives.

7.1 | *Career competencies*

The Pacific Adolescent Career Pathways research shows that high proportions of Pacific students had clear career and educational aspirations. Many students were hoping to enter the professional, community and personal services workforces, obtain further training or education upon leaving school and attain higher tertiary qualifications. Many also reported having high levels of confidence in aspects of career planning and competencies, and this increased between Year 9 and Year 11. In particular, students reported enthusiasm and eagerness in their career planning. Many were confident in their ability to use the internet to find information about jobs and choose a career that matched them and their lifestyle. These findings align with many of the Ministry of Education's career education guidelines, which contend that at Year 9 and Year 10:

> *Students build their understanding of their strengths, interests and values and start to consider how these might influence their life, learning and work choices. They are developing their confidence as learners, and articulate aspirations and dreams about their future. They understand how they relate to others and the impact their personal decisions have on their lives.*[15]

At Year 11, it is expected that students are more informed about possible pathways in the senior school and beyond and are more aware of their talents, skills and abilities in relation to work and career planning than at Year 9 and Year 10. Goal setting for qualifications and career pathways are explored in further detail at Year 11, and awareness of a range of career options is increased.[16]

Despite this somewhat positive outlook, results from the surveys relating to career planning skills and confidence were mixed. One-third of students reported elements of uncertainty around career planning, such as setting career goals, relating abilities to a specific career plan, future career success and discovering the right career. The findings also show that a high proportion of Year 11 students was worried about not having chosen a career, and students were less clear about their career aspirations than they were in Year 9 and Year 10. In light of the high proportion of students planning on entering further training or education when they leave secondary school, these findings suggest they may do so with no clear path in mind, regardless of the high confidence they may have in their career planning skills.

7.2 | *Increasing confidence in planning career pathways*

As with all students, career aspirations in the early years of secondary school are liable to change. However, what is not liable to change is that career planning and outcomes are dependent on the subjects that students select and pursue in their formative and senior secondary school years. Addressing uncertainty around career planning and increasing confidence in planning career pathways can potentially be enhanced by:

- increasing Pacific students' understanding of all future potential career opportunities based on subject choices, regardless of static or fluid career aspirations
- ensuring that Pacific students are making informed subject choices in their formative years of secondary school.

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15   Ministry of Education. (2009). *Career Education and Guidance in New Zealand Schools. Ministry of Education. Wellington: Ministry of Education.* p. 15.
16   Ibid.

7.2.1. Selecting subjects

The Ministry of Education (2012) stated that "…poor choices about education, training and employment are costly, reducing the return both for the individual and the Government".[17] Evidence also suggests that Pacific students (from Year 11) are not making the subject choices that open up future opportunities for them.[18] One reason may be that Pacific students are frequently "…directed by teachers into NCEA courses that do not ultimately meet UE [university entrance] requirements. This prevents them from moving into higher education".[19] Meyer et al (2006) assert that Pacific students attribute early subject choices to external factors, such as peers or parents, rather than interest or career goals.[20]

Findings from the Pacific Adolescent Career Pathways research contradict these views and show that, in meeting NCEA requirements, the majority of students consistently selected non-compulsory subjects between Year 9 and Year 11 because of personal interest rather than for career reasons.

Although few students in the survey chose subjects based on family, teacher or career guidance counsellors' suggestions, increasing numbers reported they had received help in choosing subjects. This contrasts sharply with the high proportion of students who reported a heavy reliance on parents (particularly mothers), teachers and career guidance counsellors for advice on career planning and options.

Subject selection is a critical component of career planning yet access to and use of potential sources of help does not appear to receive the same degree of attention. This is a major concern, particularly since students who did not receive help were significantly less knowledgeable about what NCEA subjects they needed to pursue their career goals, were more likely to want to start work after leaving school and less likely to want to continue to further training or education. In addition, one-third of students reported they were not taking the right subjects for what they wanted to do when they left school or they didn't know if they were taking the right subjects.

These findings imply there is a need for increased access to help and support for students when selecting subjects during their formative secondary school years. Increased student awareness of the importance of subject selection, and the benefits of seeking help for this, can contribute to building certainty and confidence in future career planning and opportunities.

In relation to the compulsory subjects, English, maths and science, the research shows that students most strongly agreed that English enables career options, university study and the achievement of future goals. This finding suggests there is a need to increase students' awareness of career opportunities that are reliant on maths and science and the initiatives already in place to increase Pacific representation in the health and trades workforces. For example, the Healthcare Heroes programme led by the Pasifika Medical Association aims to increase the representation of Pacific students in health sciences. Healthcare Heroes works with 15 high schools and offers mentoring, academic counselling, career events, science strengthening and meetings with parents.

17 Ministry of Education. (2012). Ministry of Education Briefing – Education Report: Review of career information, advice, guidance and education (CIAGE): findings and policy options. Wellington: Ministry of Education, p.4.

18 Madjar et al., 2009; Gorinski & Fraser, 2006.

19 Statistics New Zealand and Ministry of Pacific Island Affairs. (2010). *Career Futures for Pacific Peoples: A report on future labour market opportunities and education pathways for Pacific peoples*. www.mpia.govt.nz/assets/documents/research-documents/CareersFuturesFinalWEB.pdf (accessed 23 July 2014), p 11.

20 Meyer, L., McClure, J., Walkey, F., McKenzie, L., & Weir, K. (2006). *The Impact of the NCEA on Student Motivation – Final report*. Wellington: College of Education and School of Psychology, Victoria University of Wellington; Madjar et al., 2009.

7.2.2. Possible pathways in the senior school – academies

One of the career competencies expected at Year 11 is that students are more informed on possible pathways in the senior school and beyond. Interestingly, over one-third of students at Year 10 and Year 11 did not know whether their school ran an academy. At Year 10, high proportions of students indicated an interest in sports, services, trades and health science academies, but, for many, these were not available within their respective schools. These findings demonstrate a lack of knowledge about and accessibility to the possible pathways in senior school and highlight the potential for opportunities to be missed, since few Pacific students at Year 11 aspired to trades careers.

The Ministry of Pacific Island Affairs is working with the Tertiary Education Commission, the Ministry of Business, Innovation and Employment, Te Puni Kōkiri and the Ministry of Education to promote the Pasifika trades initiative, which provides 3,000 scholarships to Māori and Pacific students wanting to undertake trades training. This initiative, as well as increasing awareness of trade academies within secondary school settings and opportunities to engage in other academies of learning, has the potential to influence student aspirations to enter trades and other careers and increase confidence in planning career pathways.

7.3 | *Increasing self-confidence*

7.3.1. Pacific parents and families

Much of the literature indicates that parents and teachers are a significant influence on learner career pathways and educational outcomes.[21] In line with this view, many government initiatives have been provided to increase Pacific parents' participation in their child's secondary learning and to enhance understanding of NCEA. For example, in 2013, the Ministry of Pacific Island Affairs worked with the New Zealand Qualifications Authority, Careers New Zealand and the Ministry of Education to implement the NCEA Ma le Pasifika initiative. This initiative included workshops with Pacific parents, families and communities to provide quality information and improve understanding among Pacific parents, families and communities about NCEA. These workshops also aimed to promote the importance of choosing the right subjects, gaining qualifications and making the right career decisions.

The NCEA Ma le Pasifika initiative has not yet been evaluated to identify its effectiveness on NCEA level 2 achievements or any impacts that may have resulted. Another initiative targeting Pacific parents, families and communities has been developed by the Starpath project, led by the University of Auckland. The project encompasses several research initiatives and engages with schools to collect and monitor data, provide academic counselling and enhance family/ whānau engagement. The project has also produced a book on understanding NCEA in English and Samoan as a resource for Pacific parents, families and communities. The book, Malamalama i le NCEA, is available for purchase, which may limit its accessibility.

The Pacific Adolescent Career Pathways research validates the important influence parents and teachers have on students' career pathways and educational outcomes.It also shows that students' consistently received more careers advice and support from their mothers and female guardians than their fathers and male guardians. At Year 11, one-third of students indicated that their fathers and male guardians never or only occasionally listened to them or discussed their thinking about their future career. In addition, around one-quarter reported that they never or occasionally discussed future employment or tertiary education with their fathers and male guardians. These findings imply that programmes could benefit from incorporating key messages to engage more fathers and male guardians in career planning or more targeted interventions focusing on the important role Pacific mothers and female guardians play in providing career advice and support.

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21   Gorinski & Fraser, 2006; Madjar et al., 2009; Mara, 2008; Vaughan, 2008.

The research further identifies that while high proportions of students consistently indicated feeling supported by their parents and teachers between Year 9 and Year 11, most still did not expect to achieve their career and educational aspirations, and expected to achieve less. For example, at Year 10, most students who aspired to achieving a tertiary qualification expected to achieve NCEA level qualifications. At Year 11, more than half of students aspiring to any level of education beyond NCEA level 3 did not expect to achieve this. Substantial proportions of students between Year 9 and Year 11 also did not expect to achieve their preferred career aspiration. While further research is required, it can be inferred that, for some learners, despite supportive surroundings, individual psycho-social factors such as self-belief, confidence and motivation may be lacking. The evidence suggests that motivation is an important psychological concept in education and can be linked with outcomes such as curiosity, persistence, learning and performance.[22, 23, 24] The Competent Learners Study (2011)[25] indicates that intrinsic motivations,[26] measures of success and attitudes to learning can positively influence NCEA level 2 and level 3 achievements.

7.3.2. Pacific students

While it is commendable that resources have been invested in educating Pacific parents, families and communities, investment in inter-related initiatives that focus on enhancing the confidence and self-belief of students within school settings remains limited. In line with this view, in 2013, the Ministry of Pacific Island Affairs initiated the 'Achievers Project'. The project was informed by findings from the Pacific Adolescent Career Pathways research and from engagement with school principals from 25 secondary schools (with high numbers of Pacific learners). Crucial enablers, perceived by school principals as enhancing Pacific learners' achievement, are a strong sense of school spirit and sense of belonging, self-pride, confidence, esteem and motivation.

The Achievers Project aimed to work with students across 25 secondary schools to produce an online resource to enhance self-belief, confidence, knowledge and motivation to achieve their future aspirations. The online resources (available at www.mpia.govt.nz/pacific-achievers-2/#inspire) received over 30,000 hits; and anecdotal evidence suggests the production, dissemination and reception of these within secondary schools has been positive. However, the project has not yet been evaluated to identify its effectiveness and impact on students' self-belief, confidence, motivation and educational outcomes.

Recently, the Ministry of Education, in partnership with the Ministry of Pacific Island Affairs, implemented the 'Pasifika Power Up Our Kids for NCEA Success' initiative. This initiative began with an eight-week PowerUp for NCEA study challenge in 2013 where 1,700 Pacific students, parents and families participated. The Ministry of Education embarked on a three-week programme beginning in February 2014, aimed at helping students from Year 9 to Year 13 and their parents to make informed subject choices.

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22 Vallerand, R., Pelletier, L. G., Blais, M.R., Briere, N. M., Senecal. C., Vallieres, E. F. (1992). The Academic Motivation Scale: A Measure of Intrinsic, Extrinsic, and Amotivation in Education. *Educational and Psychological Measurement*, Vol 52, No 4, 1003–1007.

23 Mansfield, C. F., and Volet, S. E. (2010). Developing beliefs about classroom motivation: Journeys of preservice teachers. *Teaching and Teacher Education*. Vol 26, Issue 7, 1404–1415.

24 Toshalis, E. and Nakkula, M. J. (2012). The integration of motivation, engagement, and voice in student-centered learning. Invited paper for the *Students at the Center: Teaching and Learning in the Era of the Common Core* project, sponsored by Jobs for the Future and funded by the Nellie Mae Foundation. Available at www.studentsatthecenter.org (accessed 28 July 2014).

25 Hipkins, R., and Hodgen, E. (2011). Laying learning foundations to lift success at NCEA level 3 – Paper presented at Symposium on Assessment and Learner Outcomes 2011, Victoria University of Wellington, September.

26 Refers to the fact of doing an activity for itself, and the pleasure and satisfaction derived from participation (Vallerand et al., 1992).

Additional findings from the Pacific Adolescent Career Pathways research identified that most students in the cohort were involved in extra-curricular group activities and this increased between Year 9 and Year 11. The highest proportion of students was involved in church and sports groups. In relation to enhancing the confidence and self-belief of students outside of the school setting, church and sports settings were exemplified through the qualitative findings at Year 10 as enhancing the leadership, time management and social skills of students. Acknowledging and building on these skills within the school setting may serve to further enhance student confidence and self-belief.

This research also shows that student affiliation with church groups was perceived as a significant influence in the development of cultural identity, alongside family. Findings also indicate that a good understanding of Pacific culture(s) enhances students' confidence in their ability to do well in school. The majority of students, inclusive of a high representation of diverse multiple ethnic groupings, reported high levels of pride in their Pacific culture and values, and placed importance on being recognised as a person from their cultural group. These findings suggest that such cultural strengths could be augmented within school settings. This is supported by the fact that these strengths are described in the literature as having the potential to enhance resilience, empower individuals and collectives[27] and act as protective factors against adverse behaviours.[28]

27 Anae, M. (2009). Rethinking the relationship between language and culture in Aotearoa, New Zealand: A Samoan perspective. Refereed Conference Proceedings of the 11th Community Languages and English for Speakers of Other Languages Conference. Auckland: CLESOL, 2–5 October 2008; www.tesolanz.org.nz/includes/download.aspx?ID=125240 (accessed 28 July 2014).

28 Perese, L. (2009). You bet your life…and mine! Contemporary Samoan Gambling in New Zealand. (Unpublished Doctor of Philosophy.) The University of Auckland, Auckland.

8 | *Conclusion and implications*

By 2026, it is estimated that Pacific young people will represent close to 12 percent of the working-age population.[29] In light of these projections, there is growing recognition of the important role that today's young Pacific people will play in tomorrow's workforce. There is also an increasing perception that the job market is changing, and that the subjects students choose at high school may limit their future options and may not necessarily equip them for the jobs of the future or those that they aspire to have.[30]

Much of the available literature alludes to the fact that many Pacific peoples migrated to New Zealand with the hope of providing better educational and employment opportunities and choices for their children and future generations. The value of education was, and for many remains, critical to improving the health and wellbeing, employment, economic and social circumstances of Pacific peoples in this country.

This research expands the knowledge base on Pacific adolescent career pathway development and highlights the need not only to continue valuing education but to value making educational choices that are connected with students' career goals and employment opportunities. It also highlights the need for measures to be developed that enable, encourage and support Pacific students to:

- do what they aspire to and be aware of the implications of potential employment opportunities and student loan debt
- identify and pursue their aspirations and expect to achieve them and, in pursuing these aspirations, be aware of all other related career and educational options
- make informed early subject choices and to be aware of all career pathways that these choices can open.

The research also highlights the importance of:

- increasing students' awareness that choosing subjects is a critical component of career pathway planning
- encouraging students to value and engage more with their parents and other sources of support for advice on choosing subjects as well as career options
- encouraging students to use sources of support within schools, such as their teachers and career guidance counsellors, earlier in their secondary schooling years
- maintaining students' high levels of confidence in their career planning skills but emphasising the importance of developing a career pathway to reduce uncertainty around career planning once they reach the senior school
- acknowledging the significant role that parents, and particularly mothers and female guardians, play in career pathway development
- enhancing students' self-belief and confidence in achieving their aspirations
- increasing student awareness at Year 9 of opportunities such as academies and targeted programmes and initiatives in the senior school, and increasing access to these in students' senior years
- building on skills that are developed through involvement in extra-curricular activities within the secondary school setting.

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29   Statistics New Zealand. (2010). *National Ethnic Population Projections: 2006 (base) – 2026*. Wellington: Statistics New Zealand.

30   Ministry of Pacific Island Affairs. (2012). *Pacific Adolescent Career Pathways Report – Survey data collection wave 1: Baseline results*. Wellington: Ministry of Pacific Island Affairs.

The findings in this research provide a basis for shifting the status quo on how we think about Pacific adolescent career pathway development. The findings can also help to inform ongoing and innovative career pathway activities, policy initiatives and commitments across national and local government agencies, for example:

- The draft Auckland Council Spatial Plan includes the goal: Every young person will develop a plan while at school for further education, training or employment.
- The Ministry of Pacific Island Affairs wants to see all Pacific students making better subject choices and leaving secondary school with a career plan that will lead to higher education and/or meaningful and well-paid employment options.
- The Ministry of Education *Pasifika Education Plan – 2013–2017* includes the vision: "Five out of five Pasifika learners participating, engaging and achieving in education, secure in their identities, languages and cultures and contributing fully to Aotearoa New Zealand's social, cultural and economic wellbeing".[31]
- The report by the Education Review Office 'Review of career information, advice, guidance and education (CIAGE): findings and policy implications' emphasises the expectation that CIAGE is provided in a way that meets the needs of all learners.
- Careers New Zealand is committed to the ongoing enhancement of career education and planning assistance services and products it provides to Pacific young people, their families and communities.
- The Education Review Office is committed to improving the educational outcomes for Pacific learners and encourages school leaders to review the extent to which their curriculum responds to Pacific learners' needs and interests; builds teachers' and boards' knowledge of Pacific learners and strengthens their links with Pacific parents and communities.

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31 Ministry of Education. (2013). *Pasifika Education Plan – 2013–2017. Wellington: Ministry of Education*. www.minedu.govt.nz/NZEducation/EducationPolicies/ PasifikaEducation/PasifikaEducationPlan2013.aspx (accessed 28 July 2014).

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Ministry of Education. (2013). *Pasifika Education Plan – 2013–2017*. Wellington: Ministry of Education. www.minedu.govt.nz/NZEducation/EducationPolicies/PasifikaEducation/PasifikaEducationPlan2013.aspx (accessed 28 July 2014).

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Perese, L. (2009). You bet your life...and mine! Contemporary Samoan Gambling in New Zealand. (Unpublished Doctor of Philosophy). The University of Auckland, Auckland.

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Appendix 1 | *Analysis*

Survey weights

Table 10 provides the weights applied for students from schools in each of the three decile groupings.

Table 10: **Weights applied for students from schools in each of the three decile groupings**

Decile group	Number of schools	Weights		
		Survey 1	Survey 2	Survey 3
1–2	9	3.03	4.06	5.12
3–4	11	3.07	4.76	5.65
5–9	7	2.01	2.46	2.75

Factor analysis and regression modelling

The surveys contained more than 300 items across a broad range of topics. To help in drawing findings from the data, factor analysis was used to create scores that sit across related questions in each topic area.

Factor analysis was undertaken in SPSS for each section of the survey – for example, cultural questions, questions about students' relationships with their parents and questions about their career confidence. Cases with missing data were excluded from this part of the analysis. The analysis used varimax rotation and selected only factors with eigenvalues greater than 2. All resulting factors were successfully tested for reliability and represented by scoring variables in the data.

Regression analysis

The scores were used to create logistic regression models for each of the key outcomes:

- expecting to achieve the level of education the student aspires to achieve
- expecting to enter the career the student aspires to enter
- knowing what career the student wants to enter
- being confident in doing well in secondary school.

In addition to the factors identified in factor analysis, the following variables were used to create the regression models:

- gender
- pride in being from their own culture
- importance of the values of their culture
- relationship between parents and teachers
- liking school
- confidence in doing well in school.

Results of the regression modelling are reported in tables throughout the report and below.

Table 11: Regression table showing model results for a match between students' education expectations and aspirations.

Education aspiration/expectation match	Beta	Standard error	Exp(B)
Gender (male)	**−.319**	**.110**	**.727[a]**
Pride in culture	.026	.171	1.027
Importance of culture's values	−.111	.094	.895
Parent–teacher relationship	−.078	.077	.925
Likes school	.140	.072	1.151
Is confident in doing well	**−.317**	**.074**	**.728[a]**
Relationship with teachers	**−.168**	**.064**	**.845[a]**
Cultural understanding	**.211**	**.081**	**1.235[a]**
Exposure to non-Pacific cultures	**.396**	**.063**	**1.486[a]**
Career confidence	**−.191**	**.068**	**.826[a]**
Career uncertainty	**.282**	**.057**	**1.326[a]**
Parental expectations and involvement	.034	.063	1.035
Support from relatives	**−.146**	**.074**	**.864[b]**
Constant	.490	.690	1.632

The accuracy of the model increased from 72.6% to 73.8%. Significance is noted as follows: a (1%), b (5%) and c (10%).

Table 12: **Regression table showing model results for a match between students' career expectations and aspirations.**

Education aspiration/expectation match	Beta	Standard error	Exp(B)
Gender (male)	**.403**	**.122**	**1.497[a]**
Pride in culture	-.243	.191	.784
Importance of culture's values	.096	.103	1.101
Parent–teacher relationship	−.109	.085	.897
Likes school	**−.154**	**.077**	**.858[b]**
Is confident in doing well	.136	.081	1.146
Relationship with teachers	.057	.072	1.059
Cultural understanding	−.164	.086	.849
Exposure to non-Pacific cultures	**−.246**	**.069**	**.782[a]**
Career confidence	**−.584**	**.084**	**.558[a]**
Career uncertainty	**.692**	**.065**	**1.998[a]**
Parental expectations and involvement	.047	.070	1.049
Support from relatives	−.148	.107	.862
Constant	−.129	.088	.879

The accuracy of the model increased from 50.8% to 68.2%. Significance is noted as follows: a (1%), b (5%) and c (10%).

Table 13: Regression table showing model results predicting that students have chosen a career.

Education aspiration/expectation match	Beta	Standard error	Exp(B)
Gender (male)	**.403**	**.120**	**1.496[a]**
Pride in culture	.252	.184	1.287
Importance of culture's values	**−.395**	**.100**	**.673[a]**
Parent–teacher relationship	.144	.085	1.155
Likes school	.020	.076	1.020
Is confident in doing well	−.071	.079	.931
Relationship with teachers	.012	.069	1.012
Cultural understanding	**.205**	**.087**	**1.227[b]**
Exposure to non-Pacific cultures	**−.195**	**.063**	**.822[a]**
Career confidence	**−.715**	**.078**	**.489[a]**
Career uncertainty	**.893**	**.070**	**2.443[a]**
Parental expectations and involvement	−.026	.069	.975
Support from relatives	**−.260**	**.090**	**.771[a]**
Constant	.456	.084	1.577

The accuracy of the model increased from 71.3% to 75.2%. Significance is noted as follows: a (1%), b (5%) and c (10%).

Table 14: Regression table showing model results for whether students are confident in doing well in school.

Education aspiration/expectation match	Beta	Standard error	Exp(B)
Gender (male)	−.483	.123	.617[a]
Pride in culture	.576	.181	1.778[a]
Importance of culture's values	.159	.100	1.172
Parent–teacher relationship	.140	.081	1.150
Likes school	.929	.076	2.531[a]
Relationship with teachers	.113	.068	1.119
Cultural understanding	−.174	.089	.840
Exposure to non-Pacific cultures	.271	.068	1.311[a]
Career confidence	.368	.073	1.444[a]
Career uncertainty	−.262	.067	.770[a]
Parental expectations and involvement	.152	.071	1.164[b]
Support from relatives	.005	.078	1.005
Constant	−5.210	.740	.617[a]
Constant	.456	.084	1.577

The accuracy of the model increased from 73.2% to 77.2%. Significance is noted as follows: a (1%), b (5%) and c (10%).