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**Middle school students' experiences and perceptions of
educational decision making**

**A thesis presented in partial fulfilment of the requirements for the degree of
Master in Education**

at Massey University, New Zealand

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2016

Abstract

This descriptive case study investigated student perceptions and experience of choosing option subjects in a stand-alone middle school environment. The focus was on students making subject-choice decisions in preparation for their following year of school. A review of recent literature relevant to adolescent educational decision making was undertaken and a gap in research using student voice in the middle school years was identified.

Students in Years 8, 9 and 10 were surveyed to gain an overview of subject choice experiences at the school, and more in depth insights were shared in focus group interviews. Parents/caregivers of interviewed students, and school staff were surveyed to triangulate data from students. Reviews of relevant school and government documents contextualised the students' subject choice environment.

Quantitative data were analysed using SPSS software to identify response trends and relationships between variables. Qualitative data were analysed using a priori codes derived from research literature and emerging in initial data analysis. Findings were consistent with established research indicating both individual and school structural factors influence subject-choice decision making. New issues emerged related to the provision of advice and support for students making subject choices and developing future study plans. Implications for supporting students in subject-choice decision making and how parents/caregivers, school staff and school systems can be assisted to better respond to student needs in a middle school setting are delineated.

ACKNOWLEDGEMENTS

Undertaking this master's study through distance learning has been a challenging and at times lonely journey. I have been lucky to have been encouraged and supported by many mentors, colleagues, family and friends along the way.

I would like to express my gratitude to my supervisors Dr Jenny Poskitt and Dr Jeanette Berman for their encouragement, insightful comments and thought provoking questions. Their belief in the project and patient guidance have been constant companions on this journey.

A special thank you must go to the student participants in this study whose openness and trust allowed me to look at the issues through their eyes. My thanks also go to the Board of Trustees, Senior Leadership Team, staff and school community, particularly the parents/caregivers and staff participants, for their cooperation and permission to base this study in their school environment.

I would like to acknowledge the support of TeachNZ, whose study support grant in 2015 provided me with valuable time in the final stages of the project.

I would also like to thank Dr Mervyl McPherson for her expert assistance in using SPSS for the statistical analysis of data.

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Chapter 1: INTRODUCTION

Schools are charged with preparing students for their future in an ever-changing world (MOE, 2007). Middle school students are undergoing cognitive, emotional and physical changes at a crucial stage of schooling with significant consequences for ongoing educational success and future participation in society (Pendergast & Bahr, 2010). Making choices concerning future learning pathways through choosing option subjects is an important milestone in a student's learning (Loch, 2009).

Background

Motu School (pseudonym for the research school) is faced with the challenge of responding to a wide range of subject requests within the constraints of finite resources. The option subject system is an attempt to maximise student input and choice while maintaining an equitable distribution of resources. It was a two stage process undertaken over a three week period at the beginning of the third school term. Students were provided with a list of possible subject courses. Year 8 students were required to choose three option subjects for each semester, two of which must be from the Arts and one from Languages. Year 9 students had to choose three subjects to run throughout the school year. Students and parents were given information through teachers, option evening and an option booklet containing brief outlines of course contents. Once initial choices were made the information was collated by the school timetable team and option lines determined. Where clashes occurred or numbers were fewer or greater than those able to be accommodated by resourcing, students were contacted individually and either given their 'back up' choice or asked to re-choose from available subject courses. Students and parents were required to sign off choices.

Making subject choices in the middle school years is the first experience students have of making educational decisions which have an impact on their future learning pathways. The study focused on students' perceptions and experiences during the decision making process. Investigation was made into students' decision making strategies, key influences, current school processes and practice supporting student subject choice. Students were asked to comment on how they viewed and experienced these.

My interest in this topic stems from my role as a Head of Learning Area (HOLA) providing optional courses, my experiences of 'selling' my subject at information evenings, negotiating staffing and resourcing, teaching experiences in this area and interest in personalised learning and negotiated curriculum. While this role has given me opportunities to observe the 'option choice' decision making process and curriculum development from a teacher point of view I wanted to gain insight into how the process looked through the eyes of my students.

Boundary of investigation

The study investigated the experiences of Year 8, Year 9, and Year 10 students, a small group of parents/caregivers and staff at Motu School prior to option subject choices in 2015. Motu School is a stand-alone decile 10 middle school. The school feeds into a senior high school on a separate campus with many students also moving on to other schools in the wider community. Motu School is committed to supporting emerging adolescent learning and development and this underpins all aspects of the school. School documents relevant to subject choices were reviewed to establish a context within which students made decisions. The data gathering was undertaken over a one month period in June 2015 prior to students making subject choices for the following year.

Purpose

This study served as a review of the current situation through the lens of the students' experiences. Understanding more about how students make decisions will allow us to better prepare them for the process in terms of providing guidance and assistance to develop decision-making skills. Little information is available on how these decisions are made at middle school level, especially when moving from a middle school to a separate senior school. Motu School, as a stand-alone middle school, offered a unique site within which to investigate this. Information from the study provides an overview of how school structures and practices align with student perceptions and experiences. The study makes recommendations to assist schools, whānau, communities and policy makers to review and improve provision and support for students' decision making in the middle school years.

Thesis organisation

The following chapters present detailed reporting, examination, analysis and conclusions from the study. Chapter Two provides an international context for the study through the review of relevant recent literature related to middle years schooling, adolescent development, subject choices, factors influencing student decision making, the influences of school structural factors on student decision making and student voice. Chapter Three outlines the research design, methodology used for data collection and analysis, and ethical considerations. Chapter Four reports the findings from the data analysis, grouped under headings reflecting themes identified in the literature review and emerging in the data analysis. How the study findings relate to existing research and new findings which emerged in the study are discussed in Chapter Five. Chapter Six outlines the conclusions drawn from the investigation. Limitations of the study are identified and suggestions made for how these may be mitigated in future studies. Recommendations are made for improving students' educational decision making and suggestions made for possible future research directions arising from the study. The chapter closes with reflection from the researcher.

Chapter 2: LITERATURE REVIEW

This chapter reviews research on student decision making in the school environment. Investigation is made of the background to middle schooling and subject choices. Individual student and structural factors impacting on the process are identified. Adolescent development, motivation, attitudes and the role of key informants, along with structural factors within schools impacting on subject choice are explored. The importance of student voice in educational research is examined. Finally the research questions derived from the literature review are posed.

Middle Years Schooling

The New Zealand Curriculum vision is for students to be confident, connected, actively involved, lifelong learners (MOE, 2007). To address the needs of our diverse population, creative ways of structuring learning are required (Brough, 2008; Durling & Bishop, 2010; Hipkins, 2005; Robinson & Aronica, 2015). There is also a greater expectation that students are positioned as the key decision makers, actively identifying their own learning needs (Blenkinsop, McCrone, Wade, & Morris, 2006; Hipkins, Vaughan, Beals, & Ferral, et al., 2004; MOE, 2007). Furthermore, learning pathways and qualification frameworks have become increasingly complex (Hipkins, Vaughan, Beals, Ferral, & Gardiner, 2005, Marson-Smith, Golden, & McCrone, 2009; Vaughan, 2008). Increased options require more decisions to be made throughout the education journey, especially at times of transition (Blenkinsop et al., 2006; McGee, Ward, Gibbons, & Harlow, 2003).

Traditionally, primary schools are student focused, interactive and provide an integrated curriculum while the traditional secondary school is characterised by subject divisions overseen by specialists and with a focus on qualification attainment (Ward, 2000). Middle schools aim to bridge the different cultures of primary and secondary schools both in structures and teaching methods. A challenge for schools is the expectation to collaborate with each other and tertiary providers within the confines of limited resources and a highly competitive environment (MOE, 2013, 2014). This competitive challenge is particularly the case for the stand-alone middle school site for this study.

Subject Choice

Of all the choices middle school students are asked to make regarding their learning, subject choices are critical (Blenkinsop et al., 2006; ERO, 2013; Hipkins et al., 2004; Jensen, Madjar & McKinley, 2010; Loch, 2009; Madjar, McKinley, Jensen, & Van Der Merwe, 2009; Marson-Smith et al., 2009; Wylie, Hodgen, Hipkins, & Vaughan, 2008). Specific choices can facilitate or block options and impact on overall levels of attainment (Dickhäuser, Reuter, & Hilling, 2005; Jensen et al., 2010; Loch, 2009, Madjar et al., 2009; Wylie et al., 2008). Too much choice and an overwhelming amount of information can result in students only considering ideas that reinforce their current thinking and continuing along traditional learning pathways (Alloway, Dalley, Patterson, Walker, & Lenoy, 2004; Foskett & Helmsley Brown, 2001; Inkson, Meares, Dupuis, & Inkson, 2007).

In making decisions on subject choices the status of a student changes from consumer of education to creator of learning pathways (Loch, 2009). Students are asked to consider future directions in an adult world; a world they have not directly experienced, with perceptions being formed through the perceptual filters of others (Foskett & Helmsley-Brown, 2001; Inkson et al., 2007; Loch, 2009; Porfeli & Lee, 2012). Students are presented with the opportunity to try out new subjects, often actively promoted by subject departments with little consideration of future directions of the individual student (Harris & Haydn, 2012; Hipkins et al., 2005; Jensen et al., 2010; Smyth & Hannan, 2006, Weeden, 2006; Wylie et al., 2008). Students have the ability to drop subjects they may not like or perceive they are not good at with little or no discussion of whether their perceptions are based on actual ability or of subjects' possible usefulness for the future (Adey & Biddulph, 2001; Blenkinsop et al., 2006). Many students report they wished they had received better advice on what subjects they selected; with 20% unhappy with the subject mix they were studying (Wylie et al., 2008).

While increased choice and a more diverse curriculum is welcomed by students, teachers and parents, there is also some concern at premature specialisation which could restrict choices in the future (Alloway et al., 2004; Harris & Haydn, 2012; Jensen et al., 2010; Madjar et al., 2009). A 'choice for all' approach ignores the recognition of the structural constraints around choices and risks the danger of mistaking patterns of inequality for individual failure (Vaughan, 2008). This is especially important with regards to specialisation into vocational

pathways which may reflect traditional socio-economic and cultural patterns (Alloway et al., 2004; Madjar et al., 2009).

This study aims to provide insight into the middle school student's experience and perception of subject choice, an area which has been given little attention to date. The perceptions and behaviours of adolescents cannot be examined without consideration of the physical, psychological and emotional developments which are occurring at this time.

ADOLESCENT DEVELOPMENT

Adolescence sees a growing concern with understanding personal changes, developing a personal identity, finding a place in the adult world and establishing self-systems (Bandura, 2006; Caskey & Anfara, 2007; Steinberg, 2005, 2011). New strengths and interests are discovered (Bandura, 2006; Caskey & Anfara, 2007). The resulting changes in perception can provide challenging and often dissonant experiences for the adolescent and can impact on how they make decisions (Alloway et al., 2004; Archera, DeWitta, & Wonga, 2013; Blenkinsop et al., 2006; Caskey & Anfara, 2007; Inkson et al., 2007; Loch, 2009). Brain development, building self esteem and a sense of identity, motivation and engagement are key factors.

Brain development

During adolescence the brain undergoes a massive remodelling of basic structures affecting abilities such as thinking ahead, planning, weighing risks and rewards, regulating emotions and coordinating thoughts and feelings (Bandura, 2006; Caskey & Anfara, 2007; Pendergast & Bahr, 2010; Steinberg, 2011). Moreover changes in the brain affecting survival and emotions are underway before those affecting logical and emotional reasoning (Pendergast & Bahr, 2010). This combination of heightened interest in sensation seeking and increasing, but not yet mature, reasoning is seen as explaining the vacillation of adolescents between mature and immature behaviours (Caskey & Anfara, 2007; Pendergast & Bahr, 2010; Steinberg, 2011). It also makes them more vulnerable to making mistakes (Caskey & Anfara, 2007, Steinberg, 2011).

These developments are not the result of biology alone but are affected by experiences young people have (Caskey & Anfara, 2007; Hipkins et al., 2005; Pendergast & Bahr, 2010). Meanings are constructed based on what they already believe and understand (Caskey &

Anfara, 2007). A responsive and supportive middle school environment can have a direct, positive impact on adolescent development and identity formation (Pendergast & Bahr, 2010).

Identity development

Forming one's identity concerns how a person comes to understand who they are. While identity development is a life-long process, it is central to adolescent development (Bandura, 2006; Caskey & Anfara, 2007, Kaplan & Flum, 2010; Steinberg & Morris, 2001). Identity involves an integrated structure of personal attributes, values, and goals. Furthermore, an individual's interconnected beliefs, or self-systems, enables them to make sense of the world and on this basis decide goals and tasks to pursue (Sullivan, 1953). One view is that it is self-constructed, with the individual actively identifying, selecting, integrating and critically reflecting on abilities, beliefs, and goals (Bandura, 2006; Caskey & Anfara, 2007). Others place greater emphasis on interactions within a social-cultural environment (Kaplan & Flum, 2010, Caskey & Anfara, 2007; Smetana, Campione-Barr, & Metzger, 2006). Identity formation requires the imagining of 'possible selves' in which the adolescent explores versions of "what they might become, would like to become and are afraid of becoming." (Markus & Nurius, 1986, p. 154)

It is through schooling that young people encounter opportunities to experiment with different contexts and social roles, identify with adults, practice abilities and develop a sense of competence (Caskey & Anfara, 2007; Kaplan & Flum, 2010; Pendergast & Bahr, 2010; Smetana et al., 2006). The risks young adolescents face as they navigate this phase of life can be considerable as they make decisions and choices that will affect their future education and ultimately who they will become (Gibbs & Poskitt, 2010; Smetana et al., 2006). A critical component of identity formation is self-esteem.

Developing Self Esteem

Self-esteem is used to describe a person's overall sense of self-worth or personal value (Rosenberg, 1965). When discussing self-esteem, it is important to distinguish between self-efficacy and self-concept and how they are constructed. Self-efficacy is one's own beliefs about personal competence in a particular situation (Bandura, 2006; Pajares, 1996). Construction of self-efficacy is largely based on judgements of mastery criteria. Self-concept

refers to our perceptions of ourselves (Maslow, 1965). Such perceptions are developed through evaluation of one's abilities against social comparisons (Dickhäuser et al. 2005). For adolescents in diverse communities and from broad economic and cultural backgrounds this can prove to be a fraught process. Importantly, perceived capabilities are assumed to influence people's choices (Adey & Biddulph, 2001; Alloway et al., 2004).

While the knowledge and skills that individuals possess play a critical role in what they choose to do and not to do, perceptions of reality, rather than the actual reality are fundamentally important in educational decision making (Adey & Biddulph, 2001; Bandura, 2006; Blenkinsop et al., 2006; Jensen et al., 2010; Pajares, 1996). While previous achievement was not a predictor of choices it did contribute to self-efficacy which *was* a predictor (Marsh & Yeung, 1997; McGee et al., 2003). Academic self-concepts can be domain and subject specific (Jensen et al., 2010; Marsh & Yeung, 1997; McGee et al., 2003). Furthermore, placement in an inappropriate subject area in relation to needs or wants can have a detrimental effect on a student's sense of self-esteem (Blenkinsop et al, 2006; Durling & Bishop, 2010; McGee et al., 2003).

Adolescent motivation and engagement

The roles of self-esteem, self-efficacy and self-concept in motivating behaviour are well established, with studies showing a higher engagement in activities in which people feel competent and avoidance of those in which they do not (Bandura, 2006; Gibbs & Poskitt, 2010; Hattie, 2009; MOE, 2005-2007; Pendergast & Bahr, 2010). Engagement is used to describe what *compels* learners to invest time and effort and involves the interplay between students' emotions, behavioural engagement, and how they learn (Gibbs & Poskitt, 2010; Yonezawa, 2009). Hattie (2009) notes that engagement "is highest when students are competent, have sufficient autonomy, set worthwhile goals, get feedback, and are affirmed by others" (p. 25). Without personal commitment to something worth doing, adolescents can become dependent on extrinsic sources of stimulation (Bandura, 2006; Durling & Bishop, 2010; Gibbs & Poskitt, 2010). A vision of a desired future "helps to organize their lives, provides meaning to their activities, motivates them, and enables them to tolerate the hassles of getting there" (Bandura, 2006, p. 11). Consideration of patterns of motivational orientations and achievement is seen as crucial to successful decision making (Bandura, 2006; Dweck, 1999; Meyer, McClure, Walkey, Weir, & McKenzie, 2009; Seligman, 2012).

Engagement in schooling is shown to lessen in the middle years highlighting this as an important point of intervention for later school engagement and success (Durling & Bishop, 2010; Gibbs & Poskitt, 2010; McGee et al., 2003; Pendergast & Bahr, 2009). An environment that supports student agency, choice and autonomy and relationships in which teachers know and care about their students empowers students to take responsibility for their learning (Gibbs & Poskitt, 2010; Pendergast & Bahr, 2009). Offering students subject choice not only meets their diverse learning needs, but it also helps motivate them to learn (CCE, 2000; Gibbs & Poskitt, 2010). However, while the opportunity to make subject choice decisions in the middle school may increase motivation it also results in subject specialisation when students may have a limited conception of their future pathways (Weeden, 2006). Providing coherence through clear links to learning pathways and attention to subject choice and allocation is critical to informed decision making (Gibbs & Poskitt, 2010; Jensen et al., 2010).

ADOLESCENT FUTURE PLANNING

Vaughan, Roberts and Gardiner (2006) assert that much learning pathway and career development policy is based on two assumptions. Firstly, that young people are 'rational calculators' who carefully weigh up options before selecting a pathway. Secondly, that the driving force in their decision making is a concern about and vision for their future. However, they suggest that these may be misleading assumptions when we consider that adolescents are not yet at the stage of rational decision making and are more centred in the present than in the future. Furthermore, increased emphasis on individual responsibility and choice in education needs to be supported by acknowledgement of the social structures which constrain and enable choices (Archera et al., 2013; Vaughan et al., 2006). What roles then do aspirations, study pathways and possible career directions play in adolescent future planning?

Aspirations

Childhood aspirations influence subject and career choice (Archera et al., 2013; Alloway et al., 2004; Loch, 2009; Schultheiss, Palma, & Manzi, 2005). However, how much young people can 'produce' their own sense of a future is debated. On the one hand, aspirations are seen as socially constructed and shaped by class, gender and ethnicity (Alloway et al.,

2004, Smetana et al., 2006; Vaughan et al, 2006). On the other hand, young people are seen as active producers of their own futures (Bandura, 2006; Markus & Nurius, 1986). Others emphasise the interplay of background, context, personal responsibility and control (Blenkinsop et al, 2006; Inkson et al, 2007). Do students consider what will be required for them to achieve their aspirations when planning study pathways?

Study pathways

Two key aspects in developing future study plans are identified in research (Prosser, McCallum, Milroy, Comber, & Nixon, 2008). Firstly, there is a need for explicit discussion with students about how learning is relevant to students' realisation of their desired futures. Secondly, curriculum and pedagogy need to be more clearly connected to students' current lives and futures. Students have been shown to have little understanding of how school relates to the real world and knowledge and skills needed for the future (Blenkinsop et al., 2006; Johnson, 2000; Wylie et al, 2008). Furthermore it was found that young people received limited preparation for making decisions about the range of in-school courses and post school possibilities (ERO, 2015; Vaughan, 2008). While the aim of support is to develop 'confident explorers' who open up and maintain openness about pathways, the provision of students with clear, sequential learning pathways was not found to be given high priority in the majority of secondary schools (ERO, 2012; Vaughan, 2008). A focus of learning pathway support has been on addressing the 'failing non-academic students' with the danger that other students may be being overlooked (Jensen et al., 2010; Madjar et al., 2009). Madjar and colleagues (2009) found that not only the 'failing students' need guidance to develop successful learning pathways.

Given that decision making takes place over a long period of time and is subject to many influences, it is important that students are given opportunity to reconsider their commitment to a chosen pathway (Vaughan et al., 2006). Opportunities to transition to another school may remove previous barriers to subject choices but increase the information students need to make informed decisions (McGee et al., 2003; Wylie et al., 2008). While schools may provide students with information of their own subject offerings (or those of their expected transition school), how likely they are to promote those of competing schools in the wider community has not been investigated; an aspect of particular relevance to the stand-alone middle school.

Balancing the holistic development of the adolescent with providing a wide range of educational experiences to prepare students for the future is an on-going challenge (Beane, 1995; Brough, 2008; CCE, 2000; Gibbs & Poskitt, 2010; Pendergast & Bahr, 2009; Robinson & Aronica, 2015). Factors impacting on educational decision making must be considered when establishing the subject choice process within a school. The current secondary students 'milling and churning', where career decisions are postponed and minds changed, is perhaps not a lack of commitment or focus but the result of the sheer number of pathways they are confronted with (Vaughan et al., 2006).

Careers

It is important that middle schools not only support students to develop their identity as successful learners, but also acknowledge and respond to their career aspirations (Archera et al., 2013; Prosser et al., 2008). However, young people report that they feel their secondary education had not prepared them adequately for tertiary study or the world of work (Bolstad et al., 2012; Inkson et al., 2007; Johnson, 2000; Loch, 2009; Schuette, 2012; Vaughan et al., 2008). While influenced by interests and values, occupational aspirations have been found to be based on 'occupational familiarity' gained through interactions with family members, teachers, peers and the media (Loch, 2009; Porfeli & Lee, 2012; Primé, Nota, Ferrari, Schultheiss, Soresi, & Tracey, 2010). Porfeli & Lee (2012) found that students tend to identify with jobs occupied by their own gender and social class, and are more attracted to jobs that are sensational and glamorous. While commitment to a career was generally seen as more favourable than indecisiveness, doing so before establishing a clear and realistic sense of self may prove unsatisfactory in the long term.

Thinking broadly about themselves, connecting school learning to work and exploring career alternatives are important to encourage a more open approach to decision making (Alloway et al., 2004; Johnson, 2000; Porfeli & Lee, 2012; Schultheiss et al., 2005). Howiesome & Semple (2013) argue that challenging students' assumptions or complacency are critical elements of the career guidance process. However, most young people have little or no engagement with information sources or activities associated with career development (Bolstad, et al., 2012; ERO, 2012; Vaughan et al., 2006; Wylie et al., 2008). A unique aspect of a stand-alone middle school setting is that students are faced with a transition to a new school at the completion of Year 10 requiring additional decision making. This has

implications on the timing and type of guidance and information given to middle school students.

ADOLESCENT DECISION-MAKING SKILLS

Decision making is a complex process (Blenkinsop et al., 2006; Marson-Smith et al., 2009; Schultheiss et al., 2005). It is shaped over a long period of time, is affected by interactions and experiences and influenced by conscious and unconscious prejudices and preconceived ideas (Alloway et al., 2004; Caskey & Anfara, 2007; Foskett & Helmsley-Brown, 2001).

Development of decision-making skills shows a progressive sophistication from early adolescence (Caskey & Anfara, 2007; Blenkinsop et al., 2006; Steinberg, 2005). Greater understanding of how students make decisions will allow educators to better prepare them for the process in terms of providing guidance and assistance and developing skills necessary to make satisfying decisions (Marson-Smith, 2009).

Mind set

A good decision maker has a high level of self-esteem and self-efficacy, accounting for the willingness to make difficult choices (Bandura, 2006; Caskey & Anfara, 2007; Galotti, 2001; Marson-Smith et al., 2009). A student's mind-set is an important aspect of their decision making where performance based goals are often pitted alongside mastery based goals, requiring the ability to maintain a confident and non-defensive stance in the face of challenges (Dweck, 1999).

Choice refers to making a decision at a specific point in time (Foskett & Helmsley-Brown, 2001). Earlier decisions impact on and constrain options that are available and in turn shape choices that can be made (Blenkinsop et al., 2006; Marson-Smith et al., 2009). Accepting that concept understanding develops over time, it follows that younger students may not fully understand the abstract concepts associated with future planning and how current decisions will impact on their futures (Blenkinsop et al., 2006; Inkson et al, 2007; Vaughan et al, 2008). Hence, it is crucial that young people are made aware of any implications of their decision in terms of future pathways or constraints (Marson-Smith et al., 2009).

While adolescents may be able to think more abstractly, the accompanying fluctuation of choices over time, difficulty coping with unexpected changes and lack of consideration of alternatives, point to a lack of developed skills for decision making (Blenkinsop et al, 2006;

Steinberg, 2005). Creating a supportive environment with attention given to developing decision-making skills is crucial (Blenkinsop et al., 2006; Marson-Smith et al., 2009; Seligman, 2012). How these factors are evidenced in middle school students' subject-choice decision making is an area lacking in research (Blenkinsop et al., 2006; Loch, 2009; Vaughan et al., 2008). Furthermore, in order to ensure timely, appropriate support and information is available, it is important to identify key decision making points in the educational journey (Marson-Smith et al., 2009; Jensen et al., 2010). The stand-alone middle school, while ideally able to provide scaffolds through these early stages, is unique in that it asks the adolescent to make subject-choice decisions with little or no knowledge of the choices or environment they will encounter in their senior school years.

Strategies

The Revised Career Education Benchmarks – Secondary (2014) suggest some useful steps for decision making. Students should “know their motivations, aspirations and available options ... use this knowledge to identify their next steps” (p. 16). Furthermore, students are expected to be able to demonstrate strategies for adapting to change, reviewing dreams and choices and modifying plans.

Students are frequently being directed down pathways based on prior evidence rather than considering future directions (Hipkins, 2005; Madjar et al, 2009; Jensen et al, 2010). Ignoring a student's perceptions, terms of reference and what is important to them can lead to assumptions about motivations, values and choices and result in inappropriate guidance (Foskett & Helmsley-Brown, 2001; Jensen et al., 2010). Furthermore, students' mind sets and aspirations can change over time and there is a danger of assuming that because a student has made a choice at one time that this is the right one (Blenkinsop et al., 2006). Rather than a focus on what adolescents aspire to, there needs to be broadening of information and discussion to ensure students know what they need to achieve to meet goals (Alloway et al., 2004; Johnson et al., 2000). The acknowledgement of transferable skills a subject develops may be more relevant when discussing subject choices (Archera et al., 2013; Wylie et al, 2008).

Given that information on subjects and learning pathways is made available through schools and government documents, students, especially those who are unhappy with choices offered at their current or future school, might be expected to actively search out

information about alternatives. However, research suggests that senior students made little or no use of careers advisors or information sources (ERO, 2015; Wylie et al., 2008). Evidence that students link subjects with future usefulness makes this lack concerning (Wylie et al., 2008). Whether such a planned exercise regarding subject choice is undertaken by students in a middle school setting is not known.

FACTORS INFLUENCING EDUCATIONAL DECISION MAKING

Individual student and structural factors appear to play a part in the decision making process (Marson-Smith et al., 2009). Students not only bring a unique set of experiences, interests and aspirations to choosing subjects but do so in widely varying contexts. This review identified gaps in research into the extent of the interaction between individual student and structural factors from the student perspective in the middle school.

INDIVIDUAL STUDENT FACTORS

Subject enjoyment and perceived ability in subject

Enjoyment of a subject is the most common reason students give for subject choice in the middle years (Blenkinsop et al., 2006; Pendergast & Bahr, 2010; Schultheiss et al., 2005). Students enjoy and are more engaged with some subjects than others (Blenkinsop et al., 2006; Gibbs & Poskitt, 2010). However, there is a steady decline in positive attitudes to subjects in the middle school years (Gibbs & Poskitt, 2010). Student dislike of language learning suggests that young people may be making decisions about their attitudes to subjects at an early stage in their secondary schooling (McCrone, Morris, & Walker, 2005). Perceived ability is found to increase enjoyment of a subject and ranks highly in subject-choice decisions, particularly when choosing optional subjects (Adey & Biddulph, 2001; Blenkinsop et al., 2006; Madjar et al., 2009; McCrone et al., 2005; Pike & Dunne, 2011). When forced to choose, students tend to select the subject they feel confident in regardless of long term considerations (Dickhäuser et al., 2005). Prior achievement and streaming practices have also been shown to impact on ability perceptions (Ireson & Hallam, 2001; Jensen et al., 2010; Madjar et al., 2009, McCrone et al., 2005; Pike & Dunne, 2011). Given the impact of mind set and self-efficacy on decision making, how much an individual's decision is based on their expectation of success is an important factor in choosing school subjects, especially when making decisions about subjects in which they have no previous

experience (Jensen et al, 2010; Wylie et al., 2008). However, choices made on this basis alone may not be serving the best interests of a student's future learning pathway (Jensen et al., 2010).

Perceived usefulness of a subject

Students have been found to form beliefs that are subject-matter specific and based on the perceived usefulness of a subject (Wylie et al., 2008). These perceptions are often based on parents' advice or to naïve views of a possible career and can lead to a narrow view of learning and to ignoring the more important need for transferable skills (Adey & Biddulph, 2001; Jensen et al., 2010; Loch, 2009; Porfeli & Lee, 2013; Turner & Lapan, 2002; Wikeley & Stables, 1999). Where a subject is perceived to be useful or relevant to a goal, students are prepared to invest more effort into improving in that subject and more willing to deal with the challenges they may encounter (Bandura, 2006; Lord, 2003; Pike & Dunne, 2011, Wylie et al., 2008). This has implications for information and guidance on subject choice in schools.

Perceived status of subject

There is a high degree of consensus among students about which subjects are important, with 'academic' subjects achieving higher status than others, such as Arts and Physical Education, despite these subjects achieving high scores for 'liking' (Wikeley & Stables, 1997). This suggests that students do not appear to appreciate the wider contribution a subject can make to their social, emotional and intellectual development (Adey & Biddulph, 2001; Pendergast & Bahr, 2010; Wylie et al., 2008).

School structures may give unintended messages about the status of a subject with students and parents shown to equate the number of periods allocated to subjects with their relative importance (Turner & Lapan, 2002). How schools interpret and respond to new educational initiatives can also impact on student subject choice, with changes in what subjects are made compulsory and the ability to diversify subjects to provide different versions of courses influencing choices available (Jensen et al., 2010; McCrone et al., 2005). The extent to which a subject's perceived value influences subject choice has had limited investigation in the middle school setting (Blenkinsop et al., 2006).

KEY INFORMANTS

When presented with educational decision making what information is given to young people, by whom and how it is provided are all important considerations to avoid students making narrow choices during the middle years which may restrict later options (Marson-Smith et al., 2009). The central role of the school in providing support and identifying possible future pathways is crucial (Archera et al., 2013; Blenkinsop et al., 2006; Marson-Smith et al., 2009; Prosser et al., 2008). Furthermore, careers education programs are commonly introduced at a time when social and educational pressures on young people are pushing towards the narrowing of choice rather than exploring options (ERO, 2012; Vaughan 2008). This timing, plus young people's possibly unreal expectations for future achievements and the predominance of enjoyment as the key subject choice criteria makes for an unsteady process. Yet there is little research into pastoral or academic support for middle school students in relation to subject choice (McCrone et al., 2005; Pendergast & Bahr, 2010).

Family and cultural capital

Parents are generally the main advisors to middle school students on subject choice (Loch, 2009; MOE, 2009; Schuette, 2012; Porfeli & Lee, 2013; Turner & Lapan, 2002). Furthermore, parental support is identified as one of the factors which can modify careers advice and guidance (McCrone et al., 2005). However, only a small number of parents are shown to actively engage in their child's decision making process and if they do they tend to consider a small number of alternatives (Foskett & Helmsley-Brown, 2001; Loch, 2009; Turner & Lapan, 2002).

Parents can both encourage and discourage young people indirectly through values, knowledge and family networks (cultural capital) (Schuette, 2012; Vaughan, 2008). Parents lacking skills and resources are at a disadvantage, particularly immigrant and low socio-economic families where cultural capital may be limited (Madjar et al., 2009; Turner & Lapan, 2002). Students can also be strongly influenced by a parent's misconceptions and outdated knowledge of a subject (Madjar et al., 2009, Schuette, 2012; Turner & Lapan, 2002). Only 26% of secondary school parents had very good or good information on the link between course options and tertiary study or future jobs (ERO, 2015). Almost one-fifth of parents in this ERO survey wanted more support from schools. Parents have also been

shown to advise their sons and daughters differently, with a tendency for girls to be advised to take what they enjoy while boys were more likely to be advised to take subjects they would need (McCrone et al., 2005; Schuette, 2012).

However, more than just student and parent aspirations are required to achieve success with warnings that subject choices must be informed by much more than parents' preconceptions (Jensen et al., 2010; Madjar et al., 2009). Engaging students and parents in setting realistic academic targets, reviewing achievements and ensuring access to academic subjects for all students is important (Jensen et al., 2010; Madjar et al., 2009; Prosser et al., 2008). Parents need to be kept well informed as to the education pathways open to their children through ongoing communication between schools and families. What information students and parents find useful and how best to deliver it are questions posed in this current research.

School: Teachers, Heads of Departments (HODs), Deans and Counsellors

Students' learning pathways can be altered by what teachers do or bring to students' learning experiences (Blenkinsop et al., 2006; Durling & Bishop, 2010; Gibbs & Poskitt, 2010). Gibbs and Poskitt (2010) identified important factors influencing middle school student engagement in learning. A subject can be made more enjoyable by teaching practices requiring a more active student role. Work at a suitable level of individual challenge, material that takes account of students' learning interests and a clear learning pathway support effective learning. Such approaches can influence student attitudes to school and thereby positively affect how learners see themselves; all factors contributing to student educational decision making.

There is concern at the number of students not engaging in any discussion regarding their future pathways with either teachers or career advisors (ERO, 2015; Wylie et al., 2008). There is evidence that students who do have access to "informed adult support, and are allowed to make non-strategic choices early in their school career, are at particular risk of failing to achieve their academic potential, or of failing to gain entry to those qualifications that lead to their preferred careers" (Madjar et al, 2009, p. 6). Furthermore, students who are well supported by their school, through individual guidance and discussion

and detailed, impartial information about pathways are less likely to rely on family for guidance (Blenkinsop et al., 2006).

Concerning too, is the lack of confidence in New Zealand educators' abilities to provide a more global view of careers (ERO, 2015; Wylie et al., 2008, Vaughan, 2008; Vaughan et al, 2006). Professional development supporting teachers to provide better information and support to young people in decision making is important (Vaughan, 2008). How information provision and support is experienced in a stand-alone middle school environment is investigated in the current study.

Peers

As the world of the young adolescent expands and they begin to develop their own identity, peers and adults outside the family increasingly influence their decisions (Blenkinsop et al, 2006; CCE, 2000; Gibbs & Poskitt, 2010; Smetana et al., 2006). These influences may be conflicting and contribute to feelings of uncertainty and insecurity in decision making (Alloway et al., 2004; Blenkinsop et al, 2006; Gibbs & Poskitt, 2010).

Peers and role models are not perceived by students as important in making subject choices (McCrone et al., 2005). Conversely, teachers rate students' peers as having a strong influence and where there is a lack of school level support peers become more influential (Blenkinsop et al., 2006, Jensen et al., 2010). A corollary to this is that students with more cultural capital are often better prepared to make subject choices than those from less advantaged backgrounds, regardless of their academic ability (Madjar et al., 2009). The presence of Year 12 students in a school was shown to influence the type of advice younger students received (Foskett & Helmsley-Brown, 2001). How advice is affected by the lack of senior students in the middle school is yet to be investigated.

Media

Adolescents live a large part of their lives electronically and are increasingly building a sense of who they are and where they fit into their communities and the world through social media (Bandura, 2006; Boyd, 2011). Media is also acknowledged as developing students' attitudes and perceptions of subjects (Lord, 2003). However, research into the role media plays in student subject choice in the middle school is lacking.

The Vocational Pathways (2014) website is specifically designed to assist students to plan their learning pathways based on their possible career direction. It is also suggested as a useful support for educators to assist students to plan study options. The Howieson and Semple (2013) investigation into the use of such websites in careers education challenged their value. The range and quality of information provided varies with sites typically having factual information, diagnostic self-assessment and contact information for further assistance. For students to be able to use these sites effectively they need to be able to find the information that is relevant to them, access its value and relate it to their personal needs and circumstances. Furthermore, minority ethnic groups and those with a risk of low achievement were found to be less likely to use them. As Howieson and Semple (2013) found, “despite their apparent expertise with electronic resources, young people’s abilities to search databases and interrogate information systems are questionable” (p. 289).

STRUCTURAL FACTORS

Schools can influence subject choice both directly (through recommendations to individuals) and indirectly (by shaping the contexts in which subject choices are made) (Jensen et al., 2010; Madjar et al., 2009; McCrone et al., 2005). There is a connection between effective school systems, school ethos, staff and leadership and the students who make the most rational and thoughtful decisions and who remain happy with their choices over time (Alloway et al., 2004; Blenkinsop et al., 2006). Important in these systems are the curriculum offered, the value placed on specific subjects, timetabling, prerequisites for advancement and student selection for subjects and how schools determine and administer these (Alloway et al., 2004; Archera et al., 2013; Blenkinsop et al., 2006, Jensen et al., 2010; Madjar et al., 2009). Research into structural factors is relatively limited by comparison with individual student factors (Alloway et al., 2004). How they influence students’ subject choice decisions in a stand-alone middle school is investigated in this thesis.

While innovation in classroom pedagogy is important, researchers advise that for reform to be sustained attention also needs to be given to cultural and structural factors within schools (Beane, 2003; Blenkinsop et al., 2006; Prosser et al., 2008). There is evidence that resourcing and organisational systems do restrict how choices are provided (Alloway et al., 2004; Harris & Haydn, 2012; McCrone et al., 2005; Turner, 2003, Weeden, 2006). Indeed, a critical issue found to contribute to the academic failure of many adolescents is the

mismatch between the school's organizational structure and curriculum and the intellectual, social, physical and emotional needs of adolescents (CCE, 2000; Marson- Smith et al., 2009). A more holistic partnership in both planning and delivery between stake holders may be able to overcome these issues (Gibbs & Poskitt, 2010; Hipkins et al., 2005; Jensen et al., 2010; Madjar et al., 2009; Pendergast & Bahr, 2009; Yonezawa, 2009). There is a lack of research into how school presentation of subject choices affects students' decisions (Jensen et al., 2010).

School ethos for learning

Each school's ethos impacts on how different learning pathways are presented (Hipkins et al., 2005). Approaches to ability grouping, timing of subject choices and student access to subjects all shape the opportunities open at later stages (Madjar et al., 2009; Smyth & Hannan, 2006). Schools with a student centred ethos and less of a focus on maintaining process and systems, have been shown to better support students in subject choice decisions (Blenkinsop et al, 2006). The interplay between subject departments and school organisation helps shape choices available with subject departments traditionally competing for time and resources and reliant on student numbers for continued provision of learning experiences (Davies, Telhaj, Hutton, Adnett, & Coe, 2008; Harris & Haydn, 2012).

There is also evidence that senior students may take into account the performance of a subject department within a school with departmental and/or teacher results steering students to choose a course in the belief that they have a better chance of achieving a high grade or serving to discourage students with a low perception of their ability (Davies et al., 2008; Harris & Haydn, 2012). There is a lack of research into the influence such perceptions have on subject choices in the middle school.

School curriculum and course construction

The New Zealand Curriculum states that all curriculum decision making should put students at the centre of teaching and learning, asserting that they should "experience a curriculum that engages and challenges them, is forward looking and inclusive, and affirms New Zealand's unique identity" (MOE, 2007, p. 9). Furthermore, learning opportunities that are integrated and cumulative, rather than fragmented and rushed are more likely keep students engaged and successful (MOE, 2007). Prosser et al (2008) suggest that a change of

viewpoint is required if we are to successfully meet the needs of middle school students. Rather than seeing students' disengagement from schooling in the middle years as because they cannot or will not work for school, they suggest a more productive view is that students have come to see that school does not work for them (Prosser et al., 2008). The crossovers between subjects possible through integration can provide learners with the opportunities to see the relationship between the choices they want to make and the subjects that will help them along the way (Bleasdale, 2006; Bolstad et al., 2012; Pendergast & Bahr, 2010). However, teachers and students negotiating and co-constructing curriculum will require a change in school structure and organisation (Prosser et al., 2008).

There is general agreement that students should endeavour to keep their educational options open which may require making a less favoured choice (Hipkins et al., 2005; Madjar et al., 2009; Wylie et al., 2008). However, Madjar and colleagues (2009) warn that freedom of choice from an expanding array of courses should not be an end in itself and could have a negative effect, with students having greater opportunity to make poor choices. There is a huge variation of curriculum and course construction across schools from 'open' choice with no restrictions to banded option blocks (McCrone et al., 2006). Interestingly, in schools with limited course offerings there was a smaller achievement gap between different cultures (Madjar et al., 2006). Furthermore, when a range of options exist, students tended to sort themselves into pathways along gender, ethnicity, socio-economic and prior achievement lines (Shulruf et al., 2006; Madjar et al., 2009).

Schools must "provide all students in years 1-10 with opportunities to achieve for success in all areas of the National Curriculum" (MOE, 2013, 1ai). Why then, are some subjects made core and others not and when are these determined appropriate to set aside? The Youth Parliament report (2013) on compulsory versus elective [option] subjects in secondary schools provided insights into how students view this question. Core subjects were seen as part of a broad, general education and lay the foundation for later specialisation (MYD, 2013). Making core subjects compulsory was seen as being founded on the perception that students may not always be the best determiners of what might be appropriate for their future learning. Compulsory study has also been found to be important for lower-achieving students who may not have the confidence or motivation to take subjects they perceive as challenging (Madjar et al., 2009). However, future employment opportunities are not

necessarily related to ‘foundational learning’ undertaken at secondary school and a wide range of transportable and transferable skills may be preferable (Wylie et al., 2008; Robinson & Aronica, 2015). The young parliamentarians concluded their report with a pertinent observation; they saw students’ interests being encouraged from an early age by skilled teachers making subjects relevant and accessible as having more impact in determining a student’s future study and career choices than making subjects compulsory (MYD, 2013). This observation has implications for teacher professional learning and development.

How much flexibility schools have for innovative course design is debated. Government influences courses through stipulating core curriculum and pressurising schools to improve literacy, numeracy and IT skills (Harris & Haydn, 2012; Weeden, 2006). There is concern that the increasing marketising of schools has resulted in an increased focus on ‘educational product’ (pupil performance) rather than on the educational process impacting on curriculum and shaping school priorities (Harris & Haydn, 2012; Robinson & Aronica, 2015). Opportunity for students’ perspectives and understandings to be given provides a valuable perspective to this debate (Alloway et al., 2004; Wylie et al., 2008).

The traditional academic curriculum with division into specialist subjects is not necessarily seen as the only or most effective way to organise learning for students (Beane, 2003; Robinson, 2009; Robinson & Aronica, 2015). Robinson (2009) suggests that students do best in a broad curriculum. He proposes that a more appropriate approach, making possible an interdisciplinary, fluid and dynamic curriculum, would be for schools to base their curriculum on disciplines of knowledge. Such a curriculum must be diverse, allowing for the development of understandings desirable for all students and providing opportunities for individual’s to discover and develop their personal strengths and interests. Furthermore, such a curriculum must allow for collaboration and interaction between students of different ages and teachers with different specialities and build bridges with the wider community (Robinson & Aronica, 2015).

Subject clusters and option lines

Subject choices are undertaken within a “framework of possibilities shaped by the schools and the decisions of the adults associated with them” (Hipkins et al., 2005, p. 15). Senior

managers make strategic decisions about subject options available in response to government initiative pressures, school ethos, community needs and resources available (Harris & Haydn, 2012; Hipkins et al., 2005; Shulruf, Keuskamp, & Timperley, 2006). Subject choices made in one curriculum area can frequently reduce options in other areas due to option banding and resource limitations (Harris & Haydn, 2012; Turner & Lapan, 2022). Subject clusters have been identified in the senior years within New Zealand schools which reflect school option line practices and indicate the prevalence of pre-prescribed traditional pathways (Hipkins et al., 2005; Vaughan, 2008). The existence of similar clusters in middle schools has yet to be investigated.

Qualification structures

The National Certificate of Educational Achievement (NCEA) structure allows students to 'produce' a qualification through subject choices and assessments (Hipkins, 2005). This flexibility provides choice; however, there can also be unintended pitfalls, especially if you have limited access to quality advice and guidance when making subject choice decisions (Madjar et al., 2009). While students may have a general understanding of how qualifications are structured, Jensen and colleagues (2010) found a lack of understanding of the long-term implications of decisions made along the way. They identified a particular concern for students unwittingly finding themselves in an 'academic cul-de-sac' with limited future study options. This was especially pertinent to the 'versions' of courses which schools offer, with students found to be directed to less academic versions based on previous performance or study of a subject. Earlier subject choices and both individual and structural factors have been shown to influence the persistence of under-representation of Māori and Pasifika students in university study (Madjar et al., 2009). Many subjects need to be studied in earlier years to achieve success in higher level assessments; with languages an obvious example (Shulruf et al., 2006). In reality, the pathway to academic success is a narrow one and many students are diverted away from this to a focus on gaining credits rather than developing the skills and knowledge necessary for a future pathway (Jensen et al., 2010; Madjar et al., 2009; Shulruf et al., 2006). This highlights the need for timely, knowledgeable academic and career guidance within the middle school for students and families.

Timetabling

Most traditional timetables have a fixed number of daily periods of uniform length, with delivery of instruction in subjects (Rettig, 2013). Furthermore, core subjects (Mathematics, English, and Science) are allocated spaces first. This leads to less spaces and manoeuvrability available for the option subjects (Ferretti, 2007). To make a timetable 'work' it is inevitable that at least some students will be placed in at least some classes which are not their first choice. Students face the dilemma of having to drop subjects, requiring a ranking of choices which may further complicate the decision making process (Blenkinsop et al., 2006; Ferretti, 2007; Jensen et al., 2010). In order to address individual student needs a timetable has to be flexibly structured and able to be modified by teachers as they address curriculum priorities and capitalize on learning opportunities (CCE, 2000; Robinson & Aronica, 2015).

Transition and timing of support

There are long-standing issues around communication across education sectors resulting in infrequent liaison between schools during transition (MOE, 2010). While both Ministry and teachers acknowledge the usefulness of sharing information, a lack of resources, time constraints and the sheer amount of information can make the process seem overwhelming (MOE, 2010). Key steps have been identified to manage the transition between schools. Students should be able to gather and collate relevant information, research and compare options and use support from family, whānau and staff to select preferred options (MOE, 2103).

There are 'red flag' points in progressing along the educational pathway which fall within the middle school years; streaming of students at Years 7 and 8 based on low test scores, Year 10 subject choices and enrolment in inappropriate subjects at Year 11 (Jensen et al., 2010). This last flag point is particularly important in a stand-alone middle school setting where there is a transition into a new school environment at the end of Year 10. Furthermore, the more disparate the learning environment of a middle school in comparison with the secondary schools to which it contributes, the less effective it becomes as a transition school and the more coping mechanisms need to be put in place (Ward, 2000). This highlights the importance of collaboration between middle and secondary schools.

Early planning for transition is important to address issues of required skills and knowledge for future learning pathways (Pendergast & Barr, 2010; Wylie et al., 2008). Academic counselling and career guidance can help students make informed subject choice decisions (McCrone et al., 2005; Wylie et al., 2008). Limited research has been undertaken on the provision and timing of such guidance and support in the middle school years (McCrone et al., 2005; Pendergast & Bahr, 2010; Wylie et al., 2008).

STUDENT VOICE

Students are a largely untapped potential resource who can provide valuable insights into the design of the curriculum (Durling & Bishop, 2010; Gibbs & Poskitt, 2010; Meyer et al., 2009; Prosser et al., 2008; Wylie et al., 2008). Furthermore, students' learning is more effective and rewarding if they have a 'voice' in and ownership of aspects of schooling (Gibbs & Poskitt, 2010; MOE, 2007; Pendergast & Bahr, 2010). Young people who are actively involved in reshaping their learning opportunities are given access to new knowledge, skills and relationships that not only empower them but also prepare them for life beyond school (Meyer et al., 2009). The *New Zealand Curriculum* encourages schools to, "Look for opportunities to involve students directly in decisions relating to their own learning" (MOE, 2007, p. 34). However, there is a lack of research on the experiences and thoughts of young people where their views are given priority and the perspectives of young people are missing in much policy development (Vaughan, 2008; Yonezawa, 2009). This thesis gives central voice to student perspectives.

SUMMARY

The research literature agrees that the middle school years are a critical time for adolescent development (Pendergast & Bahr, 2010, Bandura, 2006). Choosing option subjects is a crucial decision which will affect their engagement and success at school and impact on their future directions (Blenkinsop et al., 2006; Jensen, Madjar & McKinley, 2010; Loch, 2009; Madjar, McKinley, Jensen, & Van Der Merwe, 2009; Marson-Smith et al., 2009). Furthermore, not only does this decision represent the first real opportunity students have to choose what they will study but it also asks them to connect these choices to possible selves in a future adult world (Loch, 2009). The focus in research has largely been on subject choices in the senior years with particular attention given to subjects studied for

qualification examinations. Little research literature was found on making subject choice decisions in the middle years of schooling.

There is recognition in the research literature that while adolescents are developing more competent decision making skills, these skills are influenced by the increasing awareness of strengths, interests and weaknesses and accompanying dynamic notions of self, resulting in indecision and frequent changes of mind (Bandura, 2006; Caskey & Anfara, 2007; Steinberg, 2011). Such a state can make decision making a fraught process. Adolescent decision making has received much attention in research, with diverse strategies and approaches identified (Bandura, 2006; Blenkinsop et al, 2006; Vaughan et al, 2006). An agentic view places the adolescent in the middle of the process and able to determine their choices (Bandura, 2006). An opposite view sees the adolescent directed by both internal and external factors over which they have little or no control (Smetana et al., 2006). While strategies used by adolescents to make decisions have been found to be diverse, little research was found on decision making strategies for subject choice in the middle school (Blenkinsop et al, 2006).

Studies have shown that enjoyment and engagement in school drops off during adolescence (Gibbs & Poskitt, 2010). It is suggested that placement in classes not matching students' interests or goals and without the appropriate level of challenge can impact negatively on student engagement (Jensen et al., 2010). The motivations for student subject choices are shown to be varied and are likely to change over time (Blenkinsop et al., 2006). The research literature showed an increasing concern for future plans and possible careers in senior subject choices (Alloway et al., 2004; Jensen et al., 2010). How much consideration is given to study plans and future aspirations in middle school students' subject choices? And even more importantly, how much consideration should these factors be given by schools when developing middle school programmes and subject choice structures?

Despite individual student and structural factors being identified as influences on students' educational decision making, there are gaps in research into the extent of interaction between these factors (Marson-Smith et al., 2009). Self-systems such as attitudes and perceptions are seen as central factors (Blenkinsop et al., 2006; Pendergast & Bahr, 2010). How students gain attitudes and perceptions is complex. Family, peers, past experience, the school environment, cultural and social factors all have an impact (Adey & Biddulph, 2001; Blenkinsop et al., 2006; Jensen et al., 2010; McCrone et al., 2005; Prosser et al., 2008).

Together students, families and the school interact to provide support and also often unintentional constraints and limitations (Blenkinsop et al., 2006, Madjar et al., 2009; Hipkins et al, 2005). Accurate, up-to-date information and expert support and guidance were found to be critical to successful decision making (Marson-Smith et al., 2009; Blenkinsop et al., 2006). Who provides advice, what advice is given and when it is offered are all critical (Marson-Smith et al., 2009). Choosing subjects while also transitioning to a new school for the senior years is a situation unique to stand-alone middle school students. No research was found focusing on how these interactions influence subject choices in the isolated situation of a stand-alone middle school.

School organisation and structuring of curriculum provision were shown to impact on educational decision making, with evidence that a student centred approach results in more satisfying long-term decisions (Alloway et al., 2004; Archera et al., 2013; Blenkinsop et al., 2006). However, it was also found that resourcing constraints can impact on student choice, with staffing and timetabling limiting options offered (Hipkins et al., 2005; Harris & Haydn, 2012). Innovative curriculum provision looking at integration and disciplines of knowledge are suggested as ways of overcoming these limitations (Pendergast & Bahr; 2010; Robinson & Aronica; 2015). Qualification structures influence student subject choices (Jensen et al., 2010; Madjar et al., 2009). How much consideration middle school students give this when making subject choices is an area that has received little investigation.

There are calls in the research literature to provide students' opportunity to have a voice in the development, planning and evaluation of education programmes (Durling & Bishop, 2010; Gibbs & Poskitt, 2010; Pendergast & Bahr, 2010; Prosser et al., 2008; Wylie et al, 2008). Asking students how they perceive and experience decision making will allow us to better prepare them for the process through informed support and guidance.

The extent to which established theory identified in the literature review is reflected in middle school students' experiences and perceptions of educational decision making when choosing option subjects is investigated in the current study. The research design was governed by the framing of the research problem and research questions derived from this literature review.

RESEARCH QUESTIONS

1. How do middle school students perceive and experience educational decision making?
2. How does the school respond to and support students in educational decision making?

Chapter 3: METHODOLOGY

This chapter details the research design and methodology used to conduct the current investigation.

RESEARCH DESIGN

The purpose of this study was to explore middle school students' experiences and perceptions of making educational decisions. A case study research design was chosen as it allowed for in-depth analysis of behaviours in their natural setting and flexibility in sources of data and data collection methods appropriate to the complex environment of a middle school (Baxter & Jack, 2008; Cousin, 2005; Creswell, 2009; Damianakis & Woodford, 2012; Punch, 2009). The literature review served to identify existing theory in relation to the case and was used to develop the research questions.

Case study design

The case study is an in-depth analysis of a specific case in order to gain as full an understanding of the case as possible in a natural setting (Cousin, 2005; Punch, 2009). The researcher strives to learn how a group of people think and behave relative to a certain idea with specific attention to the participants' point of view (Cohen, Manion, & Morrison, 2007). The case is a bounded system (e.g. within a middle school environment) serving to focus attention to aspects of the case relevant to the research focus (Cousin, 2005; Punch, 2009). The interest is in process rather than outcomes; context rather than a specific variable, in discovery rather than solely on confirmation (Cousin, 2005). The method of data collection is chosen in response to what is deemed appropriate in the setting, with field methods such as observation and interview being the most dominant (Creswell, 2009, Punch, 2009).

Different types of case study are identified in research (Baxter & Jack, 2008; Creswell, 2009; Punch, 2009). The descriptive case study is used to describe a phenomenon in the context in which it was observed (Baxter & Jack, 2008). The exploratory design can use a two-phase approach with qualitative data collected in the first phase and quantitative data collected in the second phase with the intention of using understandings gained from qualitative data to help construct the measures used to test findings distribution and prevalence (Punch, 2009). The explanatory design also employs a two-phase approach, but typically the first phase collects quantitative data and the second phase the qualitative data. The purpose of this

approach is to gain better understanding of quantitative findings and the way factors may influence them (Punch, 2009). Intrinsic case study explores a unique case to better understand its particularity or ordinariness (Baxter & Jack, 2008; Punch, 2009). The instrumental case study on the other hand, attempts to shed light on an identified issue or refine a theory (Punch, 2009). The choice of a descriptive case study suited the study aim of gaining understanding of student perceptions and experiences of decision making within the middle school setting.

Phases of the study

Data collection was conducted in two phases prior to students making subject choices for the following year. In the first phase, quantitative data were collected using on-line questionnaires. This enabled a more representative sampling and permitted the overall description of the situation in an objective, systematic and comparable way (Punch, 2009). Quantitative research methods focus on accounting for variance; revealing “how much people differ and then accounting for differences using relationships with other variables” (Punch, 2009, p. 263). Furthermore, establishing normal distributions using quantitative analysis allowed determination as to whether relationships between variables in the smaller interview group samples met the requirements for being able to make inferences to the general population (Cohen et al., 2007; Salkind, 2007). Interview questions were generated after reviewing data from this first stage. School documents relevant to subject choices were reviewed to establish a context within which students made decisions. In the second phase, qualitative data were collected through focus group interviews to allow the exploration of participants’ views in more depth. Students were invited to participate in the focus group interviews through an invitation in the questionnaire.

Data from questionnaires and focus group interviews were merged at the interpretation of results stage. This allowed the combination of the strengths of quantitative data (describing data, conceptualising variables, tracing trends and relationships, formalising comparisons and enabling a larger sample population) and qualitative data (sensitivity to meaning and context, local groundedness, in-depth study of smaller samples and flexibility which enable the study of processes) (Creswell, 2013). Interview transcripts were returned to participants to enable them to review the accuracy of the data collection. Peer review was sought from

thesis supervisors at all stages of data collection and analysis to ensure accuracy and validity (Punch, 2009).

Researcher role

Case study research positions the researcher in the role of observer participant (Creswell, 2009; Punch, 2009). Being able to take an objective and detached position and suspend preconceptions is imperative to the role (Creswell, 2009). Careful development of research questions and planning of methodology based in existing theory was central to maintaining researcher objectivity. Established theory identified in the literature review guided the identification of data sources, data collection methods, analysis and interpretation. Flexibility was maintained through constant reflection on and refinement of themes derived from data collection (Creswell, 2009).

Sample representation

The study population sample was drawn from Motu School students, parents/caregivers and staff to provide a broad cross section of viewpoints and allow for comparison of responses of those involved either directly or indirectly in the decision-making process. The sample group for the student questionnaire was identified through the school data base and quota sampling used to ensure certain subgroups (gender, ethnicity) of the population were proportionally represented in each of the year level focus groups. Invitations to complete the questionnaire containing a link to the survey were sent out to 700 students in Year 8, Year 9 and Year 10 through the school website administrator. The response rate was 46.86%. While the overall response rate was not high a closer look at the response sample found that it reflected the overall school population (Table 3.1).

Table 3.1: Comparison of student study sample and school population demographics

Ethnicity	NZ European	Pasifika	Māori	Korean	Chinese	South African/ Other
School data %	68	2.6	6.0	6.3	6.1	13.6
Response data %	69.1	0.6	1.5	5.9	6.5	16.4
Gender	Male			Female		
School data %	50			50		
Response data %	41			59		
Year Level	Year 8		Year 9		Year 10	
School data %	40		28		31	

Response data %	40	30	30
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While Māori student response to the questionnaire was lower than the school Māori population figure of 6%, Māori student numbers accepting the invitation to be interviewed contributed to the 6% representation (see Appendix B1.2). Fifty-two students expressed an interest in continuing to the interview stage. Thirty students from across the three year groups were invited to participate in a focus group interview for their year level which provided an appropriate number of cases for statistical analysis on the data (Cohen et al, 2007). Resources dictated that each of the three interview groups be a maximum of 10 students due to the size of the space and the time available to conduct the interviews.

The parents/caregivers of the focus group interviewed students were invited through the school administration network to complete the on-line questionnaire with twenty-one (70.0%) responding (Table 3.2). Main ethnic groups identified in the student questionnaire were represented. Higher percentages of parents of girls (61.0%) and Year 10 students (44.4%) responded. School parent ethnicity data was not available for the study; however comparison with the student sample shows an over-representation of Chinese respondents.

Table 3.2: Parent survey demographic data

Ethnicity	NZ European	Pasifika	Māori	Korean	Chinese	Other
Number	15	0	1	1	2	1
%	70.6%	0%	5.9%	5.9%	11.8%	5.9%
Gender of child	Male			Female		
Number	8			13		
%	38.1%			61.9%		
Level of Child	Year 8		Year 9		Year 10	
Number	7		5		9	
%	33.3%		23.8%		42.9%	

Thirty staff from the school were invited to participate in the on-line survey with eighteen (60%) responding (Table 3.3). Senior management, middle management, specialist, core subject and teachers of all year levels were represented in the sample.

Table 3.3: Staff Demographic data

Ethnicity	NZ European	Māori	Pasifika	Korean	Chinese	Other
Number	15	1	0	0	0	2

%	88.2%	5.9%	0%	0%	0%	11.8%
Role in school	Classroom teacher	HOLA	Subject specialist	Whānau Leader	Senior management	Other
Number	8	8	8	2	2	1
%	44.4%	44.4%	44.4%	11.1%	11.1%	5.6%
Year levels taught	Y7	Y8	Y9	Y10		
Number	7	8	14	16		
%	38.9%	44.4%	77.8%	88.9%		

RESEARCH PRINCIPLES

The researcher was mindful of the need to ensure the study was conducted in such a way as to provide a rigorous and methodical investigation. This section outlines measures undertaken to test internal validity and enable future testing of findings, examining how research rigour was ensured and how validity, reliability and generalisation of findings was protected.

Research rigour

The literature review provided examples to which the study's construct was compared, guiding valid data collection and analysis (Creswell, 2009; Punch, 2009). Inaccurate interpretation of data was minimised by triangulation and caution when making generalisations (Li & Seale, 2007). Qualitative research involves making inferences about meanings (Mendaglio, 2003). While inherent subjectivity can be seen as a lack of reliability, working alongside experienced researchers assisted the accurate analysis and interpretation of data (Li & Seale, 2007).

Validity and reliability

Multiple methods of data collection allowing for triangulation, and frequent peer review were employed to ensure validity and reliability (Driessen, Van der Vleuten, Schuwirth, van Tartwijk & Vermunt, 2005, Li & Seale, 2007). A codebook for theme identification was established from the literature review and used to establish rigorous and valid connection between statements made by the researcher and the actual data (Li & Seale, 2007). A clear, well-organised audit trail was able to further maintain validity and reliability and will allow for data to be accessed at a later date for duplication and review of the study findings (Punch, 2009).

Generalisability

Caution was taken in making generalisations to the wider population, with consideration made for sample population size and the limitations of the research design (Cohen et al., 2007; Punch, 2009). The small sample size of the parents/caregivers and school staff groups, while not allowing for generalisation across the wider population, was used to highlight possible areas for future investigation.

ETHICAL CONSIDERATIONS

Research collecting data from and about people raises ethical issues, with data collection from children requiring additional considerations (Punch, 2009). In the first instance, the Massey University Human Ethics Committee guidelines and requirements were used to identify relevant considerations and processes which had to be complied with prior to, during and after the study. To ensure student voice was heard, the study acknowledged and responded to the need to give careful consideration to the influencing factors of setting, social constructs, culture and power imbalance (Punch, 2009). This section examines ethical issues presented by the study and examines measures taken to reduce any harm they could present. Issues of consent, confidentiality, participant rights, conflict of interest and bias, power imbalances, beneficence, reciprocity, ownership of information and avoidance of harm are addressed.

Consent

Massey University Human Ethics Committee approval was sought and granted prior to conducting the research. All research requires informed consent and in qualitative research, where participants are asked to reveal deep understandings and detailed descriptions are reported, this is especially so (Cousin 2005; Driessen et al., 2005). Information on the purpose, usefulness and future use of the study information was provided through written statements emailed to potential participants and student parents/caregivers when their consent to participate was being sought reflecting the need for openness and transparency of purpose (see Appendix A). Parental/caregiver consent was obtained for all student participants prior to any data collection (see Appendix A2.1). Opportunity for discussion and questions was given in student, whānau, staff and parent forums.

Confidentiality and privacy

Confidentiality and privacy provisions were outlined and adhered to throughout the research investigation. Invitation to participate by email through the school administrative website provided private reflection on whether or not to participate (see Appendix A2). To safeguard the anonymity of respondents, no identity data were collected and all responses were anonymised by coding or using generic titles, e.g. Y10G3 for interview responses and Motu School to replace the study school title. Using verbatim comments in the final report was avoided where possible harm arising from identification of participants was a possibility. Participants were given Massey University Human Ethics Committee and supervisor contacts to approach if they had concerns regarding any aspect of the study (see Appendix A).

Participants were made aware that their participation was voluntary and that non-participation would incur no disadvantage (see Appendix A). In line with established practice, participants were given the right to refuse to answer or withdraw at any time, and were informed about limits of confidentiality (Damianakis & Woodford, 2012). All data was stored electronically in the researcher's password protected files. Consent forms were stored in a locked cabinet, and will be destroyed after one year.

Conflict of interest and bias

The possibility of a conflict of interest and/or bias arising in the research was guarded against by frequent supervisor review and triangulation of data across data collection methods and sources (Cochran-Smith, 2005). Allowing participants to review responses during the investigation provided opportunity for any bias in reporting or analysis to be identified. Comparisons with literature review findings allowed for further reflection.

Dilemmas are raised in the validity of interview data where sources of influence are difficult to minimise or control (Siedman, 2006). At the end of the focus group interviews, students were invited to request transcripts and give feedback and comment in a follow up group session facilitated by someone other than the researcher. This provided them with the opportunity to reflect on responses and allowed feedback on possible biases in recording and interpretation which may have arisen from the researcher's stance. No participants took up this offer.

Power imbalances

Initial invitations for completion of questionnaire and participation in focus groups were made through the school administration to address the possible perceived power imbalances and avoid any actual or perceived coercion. Full disclosure of all information and potential risks and benefits to participants were clearly outlined in the information sheets provided (see Appendix A).

Students were made aware that participation was optional through whānau (house) assembly talks and also by the teachers administering the on-line survey. Teacher and parent/caregiver data was collected through a voluntary, anonymous, on-line survey lessening possible power imbalances and acknowledging time constraints.

Dual teacher and researcher role

The dual teacher and researcher role raised some ethical issues which were identified, discussed and addressed prior to the study being undertaken and continued to be reflected upon throughout the investigation. Differentiating work and study commitments and time allocations were clearly negotiated as part of gaining permission for the research to be undertaken at the school. Actions, time frames and responsibilities were outlined with the school principal and affected colleagues through meetings and information sheets. Roles and potential conflicts of interest were clearly acknowledged to participants. It was made clear when each role was being undertaken. Confidentiality processes were strictly followed to maintain privacy and anonymity of the organisation, staff and school community (see Appendix A). Potential conflicts of interest arising from the researcher Head of Faculty role which may have impacted on ability to provide subject advice were mitigated by collaboration with colleagues and careers staff. Respectful acknowledgement of colleagues, organisation and community were considered in all reporting (MacLean, Mark, & Poole, 2010).

Cultural considerations

Cultural advisors were consulted prior to data collection (see Appendix A1.1). Collaboration with international department staff and established parent groups within the school provided resources and support in terms of language translation and culturally appropriate data collection and interpretation, and dissemination of information (see Appendix A1.1).

Opportunity was given to survey respondents to respond in their own language through the offer of translation assistance by the survey administrators to complete the on-line survey. Interview participants were given the opportunity to provide responses in the alternative format of written responses to interview guide questions. No participants took up these offers.

Benefits

Helping students and their whānau understand the importance of subject choice decisions in the middle school; how they relate to and may impact on future study plans and career choices, is central to assisting them in decision making. This study will benefit the students, families, whānau, school and school community through enabling better understanding of the subject choice process and a greater awareness of how best to support our middle school students and all involved in the decision making process. Findings will also be more widely useful in discussions concerning the allocation of resources to middle schools.

Reciprocity

Providing an opportunity for student voice is an important part of developing a curriculum which engages students and reflects their needs (Prosser et al., 2008). This study adds a specific middle school perspective to the existing body of knowledge surrounding subject choice decision making. This will be particularly useful to educators and educational policy makers in terms of meeting the government objectives of better informing student consumers of educational pathways and preparing them for the world beyond school. Involvement of parent/ caregiver and staff groups provided an opportunity for sharing information and including all groups in discussions on curriculum and school structures.

Ownership of information

An on-line written summary of findings will be made available to all participants on the research page of the school website. Opportunity will also be provided for sharing information to all interested school groups through staff, student and parent forum groups. Articles may be published related to the findings of the thesis research.

DATA COLLECTION TOOLS

Questionnaires

Separate questionnaires were administered to the three sample groups in the study; students, parents/caregivers and staff. This triad of questionnaires allowed for triangulation of data and enabled a comparison of data from three different perspectives. Using the Google docs platform to administer the online questionnaires allowed for efficient data collection from a broad sample of respondents. Demographic information was collected to enable later consideration of these variables.

The student questionnaire surveyed influences on making subject choices, attitudes to subjects, future planning, decision making and school support (see Appendix B1.1). The questionnaire was available for completion for one week prior to subject selection at the school. This allowed for the collection of data within a set time period, lessening the effect of outside influences which could have occurred over a longer period of time. Questions were multiple-choice or selection items with opportunities for respondents to expand on their responses in each key area. An invitation to participate in the next phase of the study was included.

The parent/caregiver and staff questionnaires surveyed perceptions of their child's/ students' subject choice decision making, the subject choice process at the school, access to information and their level of confidence for assisting their child/ students to make informed subject choice decisions, with the purpose of providing deeper contextual background to situate and interpret the students' experiences and perceptions (Punch, 2009). An opportunity for respondents to expand their answers was provided at each question.

Focus group interviews

A focus group interview situation encouraging people to share and expand on their views, perceptions, motives and reasons was highly suitable to the aims of this study. (Cousin, 2005). The focus group allows the researcher to gain a large amount of information, containing a multiplicity of views in a short amount of time (Cousin, 2005). While structured interviews and questionnaires have questions planned and standardized in advance, semi-structured and unstructured interviews allow for more open ended discussion and invite

responses of greater depth (Punch, 2009). The group interactions can reveal aspects of a situation which may otherwise have been overlooked. Whereas the group interview places the interviewer in the central role, a focus group interview situation is particularly useful where there may be a perceived power difference between the participants and researcher which was the case in this study (Punch, 2009). The participants were selected because they had characteristics in common (year level and subject choice experience) and are similar in terms of status or power allowing for themes and patterns of perceptions to be identified (Cousin, 2005). A focus group interview situation can be empowering for participants by providing opportunity to work collaboratively with the researcher and a means for them to be valued as experts (Cousin, 2005).

To attempt to ensure the views came from a representative sample, including those who may be less articulate, confident or less trusting of others with personal or sensitive information, a balance of gender and ethnicity was made and students were given the opportunity to respond in alternate formats, individual interviews or written responses. Triangulation of data assisted in determining whether views were those of the group or of individuals (Punch, 2009).

The focus group interviews took place in separate, one hour sessions at Motu School during the school day. The groups were facilitated by the researcher. The facilitator's role was to monitor, facilitate, moderate and record the discussions (Punch, 2009). While the group was directed by the topic and questions supplied by the researcher (see Appendix C2), these were supplied only to start the interview session and keep it moving (Punch, 2009). The discussion was recorded using audio recording and transcribed prior to analysis. Every effort was taken to ensure confidentiality and privacy as outlined in the consent section of this thesis.

Document review

An overview of school option, timetable and career policies was undertaken in order to provide a context within which students in this study made their decisions (Blenkinsop, McCrone, Wade, & Morris, 2006). Focus was on the curriculum offerings, established processes, support mechanisms, school ethos and document context.

DATA ANALYSIS

Data analysis followed standard procedures of data reduction, data display, and formulation of proposals (Punch, 2009). Firstly, characteristics of the populations sampled were described and then general patterns and relationships among the variables were identified in order to enable factor analysis and theme derivation. Data from each year level were analysed and coded separately (see Appendix C) and then data from all year levels was merged and compared (see Appendix C2). Data were grouped and compared across year levels, gender and ethnicity to look for pattern matches, contradictions and new information which may have emerged (Cohen, Manion, & Morrison, 2007).

Quantitative data analysis

Analysis of quantitative data was undertaken using SPSS computer software to determine relationships between variables and comparisons across groups using variance and correlation tests (IBM, 2013). The accepted level of significance in all tests was $p < .05$ which is the widely accepted level in educational research (Punch, 2009).

Descriptive statistics

In order to make sense of the large amount of quantitative data collected, descriptions of distributions and frequencies were made to locate the most common responses to each question, with the standard deviation used to determine the spread among the population sample (Creswell, 2013). Measures of central tendency and dispersion were used to summarize the data for each question variable and understand the variability of scores and characteristics of each sample group (Creswell, 2013). Division of variables into sub-groups, such as gender and ethnicity, was determined by the sample size of proposed groupings identified in frequency tables (Creswell, 2013). For example, to enable ethnicity variables to be investigated, groups were combined to ensure sufficient numbers for statistical analysis (Korean and Chinese were combined to form an Asian group and South African and Other European were combined).

Nominal and ordinal data

Nominal data, such as year level, gender and ethnicity and ordinal data, such as level of confidence or engagement, were collected in the survey. Calculations of frequency

distributions and percentages allowed comparison of data across groups (Creswell, 2013). In addition, cumulative frequencies and percentiles were examined to identify both the variation in responses and to give an indication of a typical response (Ary, Jacobs, Razavieh, & Sorenson, 2010). Information was used to determine grouping for further analysis (Salkind, 2014). For example, to determine the relationships between year level and liking subjects, the student sample was divided into discrete categories; Year 8, Year 9 and Year 10 (see Appendix C2). Other divisions were to enable investigation of ethnicity and year level (see Appendix C). To calculate Question 1 and Question 2 for bivariate analysis and statistical testing, for each student, responses a to h (subject specific) were added, then divided by 8 (the total number of responses added) to give an average score for each student on how much they liked their subject (see Appendix C2).

The strength of relationships between variables determined whether to look at the groups separately or together when making comparisons. Identification of outliers or skewed data sets were investigated further to determine whether they were a result of test or data entry errors or a true response (Salkind, 2014). For example, skewed results to questions on the experience of choosing subjects were identified as being due to the Year 8 respondents' lack of experience of the process. A more representative result was able to be obtained through examining responses from only Year 9 and Year 10 students.

Inferential statistics

Inferential statistics looked at the relationships between independent variables, such as attitude to a subject and perceived level of ability in a subject, allowing inferences to be made about the population and generalisations to the wider population of interest (Punch, 2009). Chi-square tests were run to assess the relationship between identified variables to evaluate the likelihood of a prediction being the result of interaction of variables or by chance alone and to determine the strength of any relationship (Ary et al., 2010). Where the significance value was greater than $p < 0.05$ the relationship was deemed to be significant (Salkind, 2014). It must be remembered here that these tests show only the probability of a correlation, not causation. Furthermore, the smaller the sample size the less reliable the results (Salkind, 2014).

Interview data

The interviews sought to collect more in-depth information on the students' perceptions of subject choice decision making. In order to preserve student voice, transcripts of interview data and researcher memos were kept in interviewees and researcher's own language. Data codes, such as self-systems and school structures, were determined using established research findings and the study's research questions (see Appendix C2.1). These codes were used to analyse the transcripts and identify recurring themes (Saldana, 2008). Data analysis involved coding, memoing, abstracting and comparing responses. Peer feedback from supervisors was sought and data reanalysed throughout the analysis process. Staff questionnaire, school document data, researcher notes, reflections, remarks and memos were also analysed using these codes (see Appendix C). All data were grouped and compared to look for recurrent themes and pattern matches (Punch, 2009; Saldana, 2008). Links and comparisons were used to establish possible relationships. Subsequently, analysis across all data sources was undertaken, links to research findings identified and propositions formulated (Saldana, 2008).

ISSUES ARISING

Possible contradictions between student and staff perceptions, overviews of documents and aims, and what actually happened could have been revealed. Triangulation of data through comparison with questionnaire responses and peer review lessened the divergence of verbal responses and behaviour (Punch, 2009). Allowing respondents opportunities to comment on interpretations before release allowed for possible misinterpretations to be discussed and clarified and was important to maintain trust and avoid unintentional harm (Punch, 2009).

Possible identification of individuals due to the small sample number of staff and parent/caregivers was a potential issue. Strict adherence to confidentiality and privacy protocols coupled with an opportunity for respondents who may have been affected to review findings prior to public release served to reduce the risk of harm (Punch, 2009).

SUMMARY

This chapter justified the choice of a descriptive case study design and detailed the research methodology. The role of the researcher was examined in relation to professional and

research responsibilities. The representativeness of the sample population was examined and limitations for generalisation identified. Data collection methods were outlined and their suitability for answering the research questions discussed with reference to research literature. The chapter outlined measures employed to ensure research principles and ethical guidelines were appropriately applied. The themes identified in the data analysis are examined in detail in the following chapter.

Chapter 4: FINDINGS

This chapter reports on the findings of the investigation. The findings have been grouped into themes identified in the literature review and relating to the research questions: the decision-making process, influences on subject choices, key informants, information and resources, future planning, transition, student voice and suggestions for improvements.

In an effort to give the students a voice, the language of the students has been used as much as possible to illustrate the findings. For most themes questionnaire data have been analysed and presented in tables; but a few themes emerged or were explored more fully in the focus group interviews (such as the decision making process). Given the small sample size of the parents/caregivers (21) and staff (18) groups, statistics cannot be used to generalise across the wider school or general population. However they are of interest for identifying possible relationships which could merit future investigation with wider population samples. The following findings suggest students apply a less than systematic approach to the decision making process and a huge variance in information available to and used by students.

THE DECISION MAKING PROCESS

Being able to choose subjects you want to study from a range of different subjects is a new experience encountered by students in the middle school. “This is my first high school year so it was quite new to me to be able to have options”(Y9B6). While this was an exciting development in their educational journey it was also perceived as a time when students saw themselves as being pressured from multiple directions and being asked to consider many important factors which may impact on their possibilities for the future. Not all students felt adequately prepared to meet these challenges. One student commented, “Everything happened like, all over the place and I didn’t really, couldn’t really keep up” (Y9B6). In an attempt to cope with the decision making process, students employed a variety of tactics, with the strategies of planning, researching and eliminating options the most frequently referred to in interviews (see Appendix C2.6).

Planning

Many students at all year levels referred to some form of planning to help them with their subject choices. Students wanted to choose subjects that were ‘correlated’ with their other

subjects or chosen career path, that would 'benefit' them in future goals or that would "set them up for the next year" (Y10G4). Strategic planning was evident with students speaking of "trying to expand myself as much as possible" (Y10G4) through choosing a broad range of subjects. The school Option Policy (2014) and Career Policy (2012) identify the importance of students' planning in subject choice decision making, however neither document provides guidelines as to what form this planning may take.

Researching

The amount of research students reported doing before choosing subjects ranged from "zilch" to "heaps". Some students had made efforts to research how the subjects would help them reach their goals and also explored possible future career directions. "You actually kinda searched it out ... What am I going to need? What am I going to do? What they want from me" (Y10G6). However, others revealed a more haphazard approach to choosing subjects. While students acknowledged the need to "think about it" (Y9B6), they were not proactive in researching information, saying they would "wait" for the option evening information or "I shouldn't but I'm kinda just leaving it" (Y10G1). Others "just assume that that's what these subjects would be like" (Y9B6).

Interviewed students indicated that subject choice became more important as they progressed through the school; "they'll get more and more important as your school life progresses, just because you're getting closer to the decision that you really need to make in your life" (Y8B2). Another said subject choices are "slightly [important] but not extremely because ... we're still young and so we're still learning what we're good at and what we're not best at" (Y8B1). For those still unsure of what choice to make, there was always the fall back of choosing the popular options. As one student commented, "its popularity ... maybe ones that everyone's talking about may influence you to join" (Y9B6).

Eliminating options

The interviewed students reported a need to eliminate choices from a range of options, whether by trial and error, ranking against criteria or an elimination process guided by conscious or unconscious outside influences. What it was they were looking for in a trial and error process proved interesting. Some saw the middle years as a chance to try something out and they "worked down the list" (Y10 G4). Students talked of seeing "if they

liked it”, “were interested in it”, “were good at it” or alternatively “not good at it”. Others spoke of having a taster “to get an idea of what I wanted to do in the future” (Y8B1). While these first choices revolved around attitudes to subjects, when required to re-choose subjects due to timetable clashes or classes too full, students tended to focus on how the subject would help them achieve “what I might need for my future” (Y9G9).

Ranking a subject according to their self-perceived ability in it was also mentioned. Students in Year 10 suggested that they would be unlikely to take a subject for NCEA that they had not studied in previous years, as they would not know if they were good at it. Instead they would “play it safe” (Y10G6). Such an approach presents difficulties for schools wanting to encourage students to take up the challenge of new learning areas.

Students were also aware that their mind-set might change over time, requiring them to rethink their future directions. While the subject choice process may only be undertaken once every year, “It’s not like just once a year you decide what you want to do [in the future]” (Y10 G5). Students warned that “your opinions can change between now and university” (Y8B2). Some students, especially those in the lower year levels, felt that “at this age [they] don’t really know what their main interests are ... what they’re most good at” (Y9B2). While students felt that they would be able to change direction, with some planning for this by “keeping options open”, they expressed concern that they may be “stuck” with something they did not like. While the school policy allows for subject changes, there are time limits within which changes can be made. This allows for students to receive some guidance regarding the wider implications of a subject change; time for parent and teacher consultation and consideration of impacts from school structural factors such as class sizes and timetabling (Motuschool, 2012). However, such a late choice of subject and direction may result in fewer choices available due to classes already being full. These findings highlight the importance of students making informed decisions at the outset.

Students also reported self-system factors (that are dealt with more in the next section), particularly their attitude to a subject and their perceived ability in a subject, as affecting their ranking of options. Interests and enjoyment were common themes for directing subject choice voiced in all the interview groups, with students linking their choices to “passions” and “having a strong interest in” selected subjects (see Appendices C2.3, C2.4 and C2.5). Students suggested that “you’re going to move towards the one that you’re good

at” (Y10G10), another “chose what I thought I was good at” (Y9G9) or went away from a pathway because they found they were “not good at it” (Y9G9). However, some students were able to point out pitfalls in this approach. One student explained that choosing subjects using these criteria “has a huge impact on the way we’re going to think about our subjects, because if we know we are not good at something then half of us might go, oh well, then I’ll need to take this next year because I need to work on it. And some of us will go, oh well, I’m good at that so there’s no point in actually doing it, so they’ll do a different subject” (Y8G6). Another warned, “If you’re already good at a subject and you’re not choosing things that you don’t like or are not good at, then you are not challenging yourself” (Y8B2). A further aspect that was revealed in the student interviews was students limiting their goals by their low self-efficacy. One student commented that “I’m not smart in general ... I can get away with not getting excellence” (Y10 B7). There appears to be two stances being taken here. One is built on current strengths and abilities being the basis for eliminating choices in study plans. The other relies on an awareness of possible futures and what skills, learning and attributes may be needed to be developed to achieve success. Regardless of which strategy students employ to make subject choice decisions, all will be influenced by a variety of different factors.

INFLUENCES ON SUBJECT CHOICES

Overall self-system factors (such as attitudes to subjects, interests and enjoyment) and perceptions of ability (seen in regard given to grades and exam results), were reported by students as the main influences on subject choices (Fig. 4.1). Future planning influences had somewhat less impact.

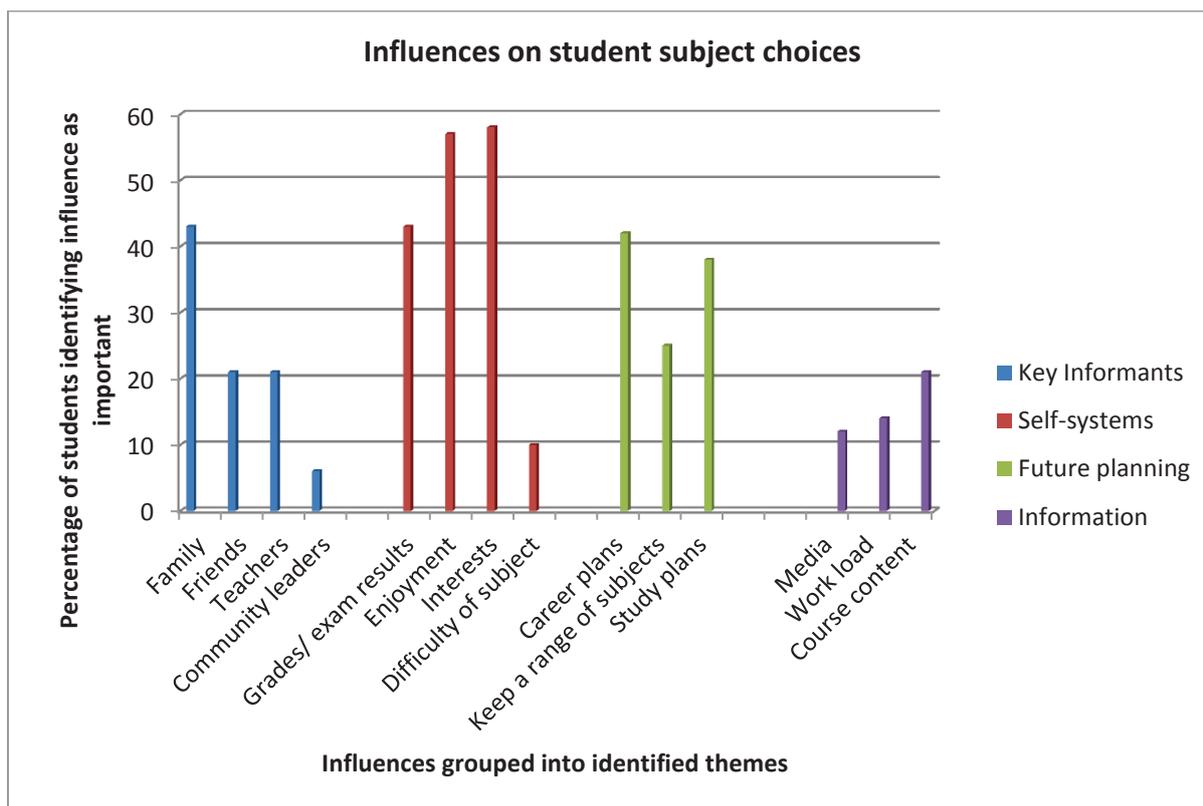


Figure 4.1: Influences on student subject choices

Relationships between influences on student subject choices and gender, year level and ethnicity variables were examined using chi square tests (see Appendix C3.1). Some relationship was found between key informant influences on subject choices and gender, with males more likely to be influenced by family, friends, teachers and community leaders than females (Table 4.1).

Table 4.1: Relationships between influences on subject choices and gender

Influence	Male	Female	Significance
Key Informants			
Family	49.6%	37.8%	χ^2 p = .048
Friends	68.7%	56.2%	χ^2 p = .022
Teachers	24.8%	18.9%	χ^2 p = .017
Community leaders	45.3%	27.9%	χ^2 p = .001
Self-Systems			
Interests	54.7%	60.3%	χ^2 p = .308
Enjoyment	54.3%	59.2%	χ^2 p = .597
Grades/ Exam results	38.0%	47.1%	χ^2 p = .295
Perceived difficulty of subject	13.2%	7.7%	χ^2 p = .396
Future Planning			
Career plans	44.2%	40.5%	χ^2 p = .494
Study plans	32.8%	41.5%	χ^2 p = .429

Range of subjects	21.4%	26.8%	χ^2 p =.383
Information			
Media	13.3%	11.0%	χ^2 p =.163
Workload	17.1%	11.0%	χ^2 p =.360
Course content	17.3%	23.2%	χ^2 p =.182

A relationship was found between ethnicity and the influences of workload and subject difficulty on subject choices (Table 4.2). In discussion on this during interviews, students tended to suggest that high workload and a perceived high level of difficulty of a subject tended to deter them from choosing the subject, with students wanting to know how much homework and how much studying they would be expected to do to help them make subject choices (see Appendices C2.3; C2.4; C2.5).

Table 4.2: Relationships between Influences on subject choices and ethnicity

Influence	New Zealand European	Asian	South African/ Other European	Significance
Difficulty of the subject	6.1%	16.0%	19.2%	χ^2 p = .004
Work load	50.9	72.5%	50%	χ^2 p = .037

Differences were found in what were reported by parent/caregivers and staff as the greatest influences on students' subject choices (Fig. 4.2). Grades and teachers were seen by the parent/caregiver group to have the greatest influence on students' subject choices, followed by the potential to lead to future studies. Staff saw friends as the major influence. Interestingly, teachers did not see themselves as influential as parents/caregivers did, and parents/caregivers did not see themselves as important as staff did.

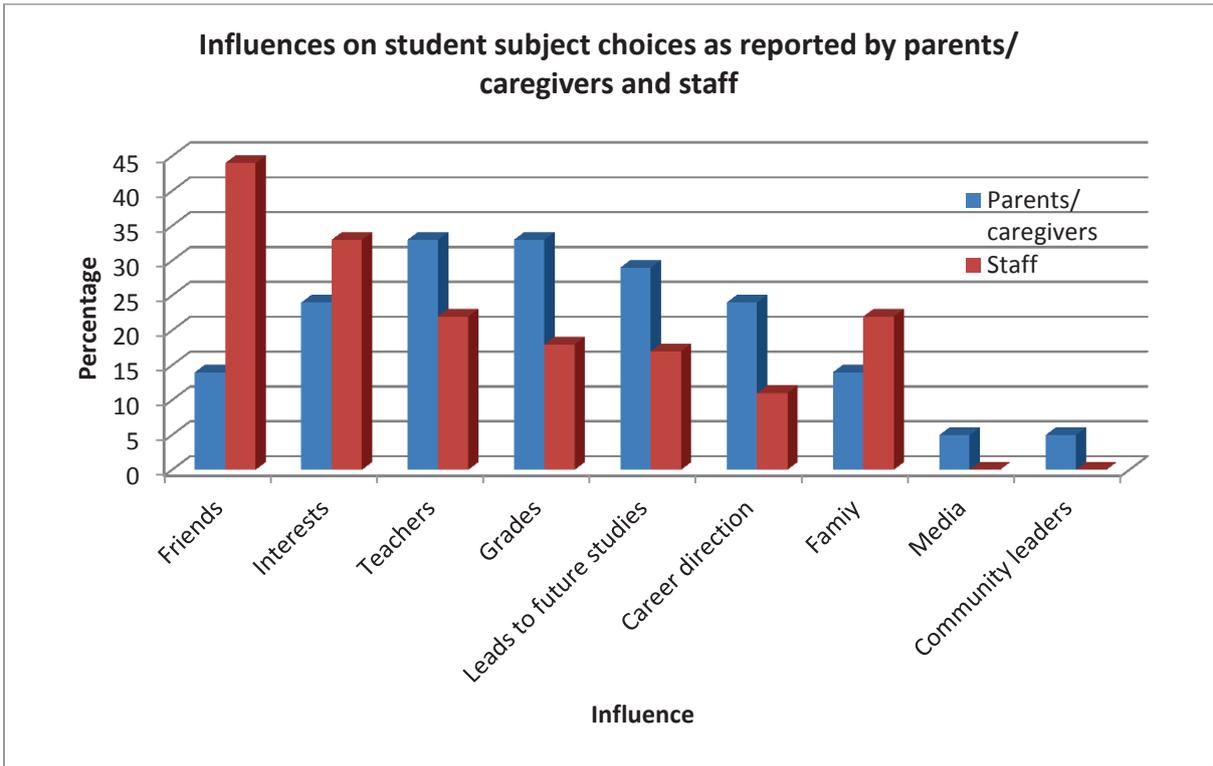


Figure 4.2: Influences on student subject choices as reported by parents/caregivers and staff

Attitudes

Students’ attitudes to subjects were gauged in the questionnaire by asking students to report on their perception of liking their subjects and their perceived ability in subjects. Overall, 31.2 % liked subjects a lot and over half the students (68.3%) indicated liking a lot or liking their school subjects. However, examination of the relationship between the variables of year level and liking a subject showed a strong, but declining relationship ($p < .001$). Liking a subject lessened as the year level increased (Fig. 4.3).

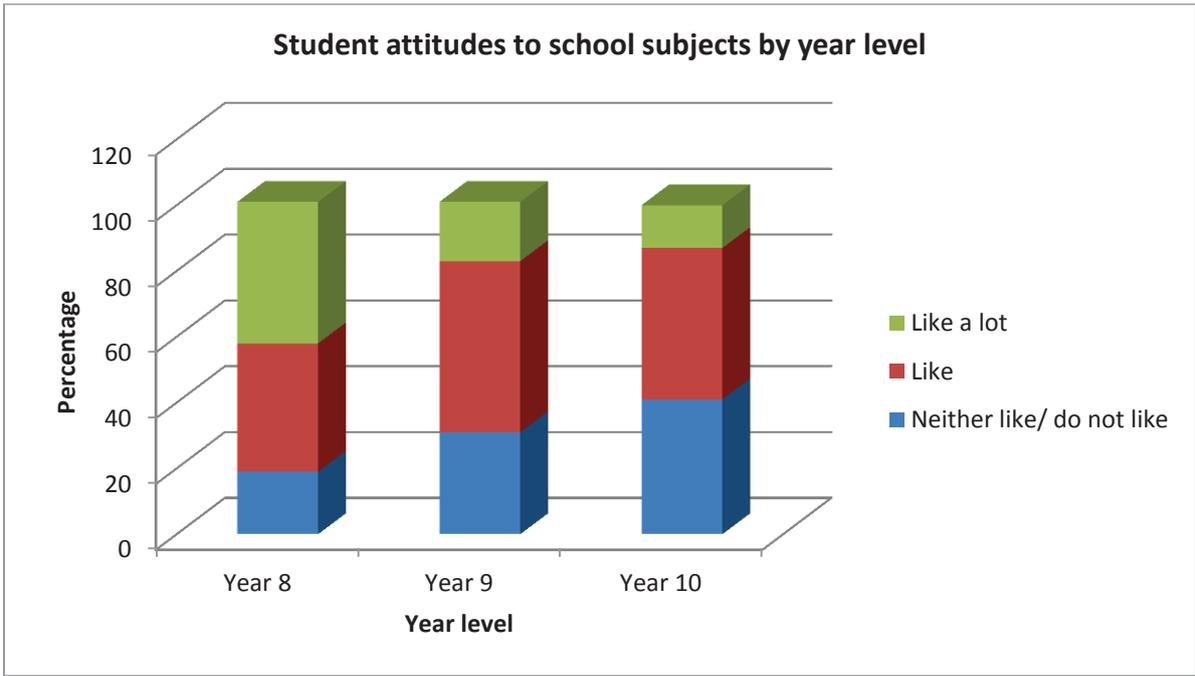


Figure 4.3: Student attitudes to school subjects by year level

Year level differences were also shown in how much students view subjects offered as matching their interests (Table 4.3). While there was an increase from Year 8 to Year 10, there was a decrease from Year 9 to Year 10. This may reflect the changing focus for Year 10 students towards future studies. No significant relationships were found for gender and ethnicity (see Appendix C2).

Table 4.3: Relationships between liking subjects and year level

Subjects match interests	Year 8	Year 9	Year 10	Significance
extremely well	4.0	17.7	11.2	χ^2 p = .004

Perceived ability

Overall, 67.8% of students perceived themselves to be very good at their current subjects. A strong relationship (p < .001) was found between perceived ability and year level, with ability perception decreasing as year level rises (Fig. 4.4).

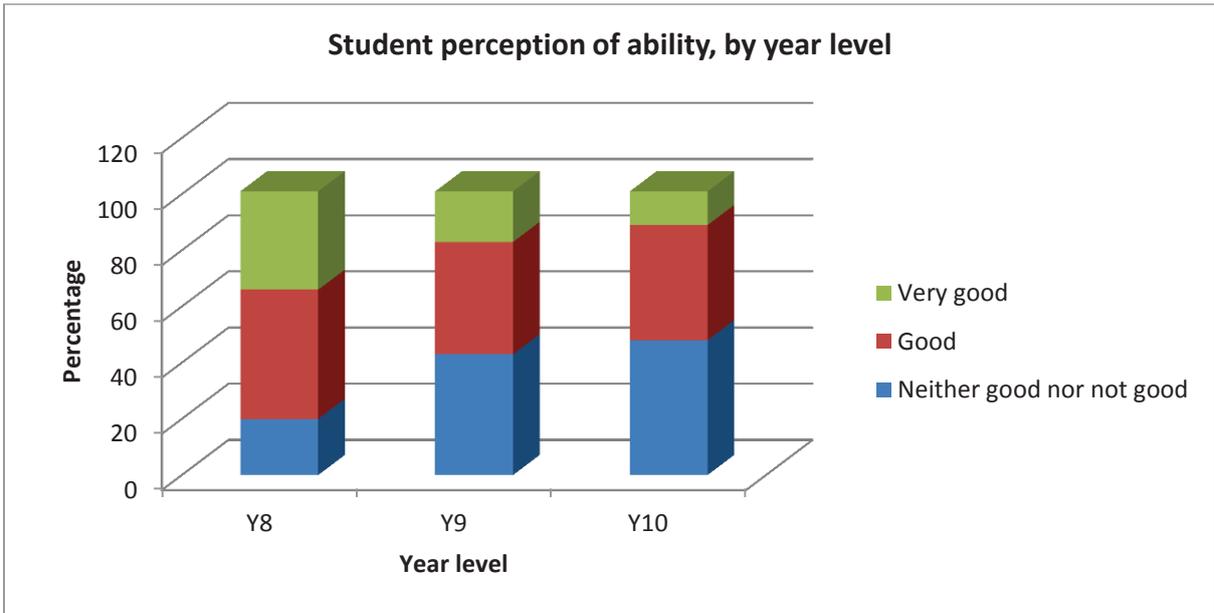


Figure 4.4: Student perception of ability, by year level

Achieving well in subjects was seen as important by all interview respondents, with students suggesting that good grades would provide greater choice later on. Year 9 and Year 10 students spoke of the importance of doing well because “you’re preparing yourself for later and you need ... good grades” (Y9G3). Achieving good grades was also seen as a strong motivation for engagement with students talking of “really going to knuckle down” (Y9B6) and “trying harder this year (Y9B1). An ability to gain “early” credits in National Curriculum examinations (NCEA) was also mentioned by students.

Comparison was made between perceived ability in a subject and liking a subject (Fig. 4.5). Students’ perceived ability in subjects and their attitudes to subjects showed a strong positive relationship ($p < .001$) with greater enjoyment experienced in subjects they perceived themselves to be good at (see Appendix C3.1)

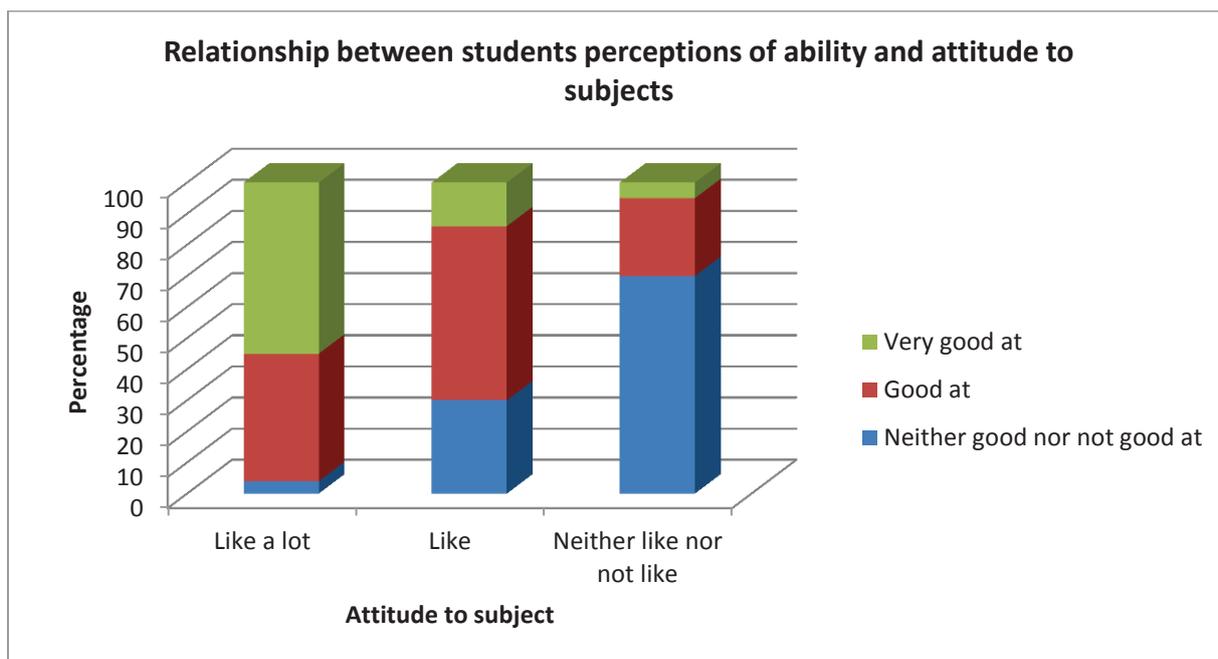


Figure 4.5: Relationship between student perceptions of ability and attitude to subjects

Furthermore, there was a strong relationship between year level, positive attitudes and perceived ability in subjects, with levels of positive attitudes decreasing as year levels rise (Table 4.4). The Year 10 student who is good at Visual Art is more inclined than the Year 8 or Year 9 student to like the subject, while the Year 10 student who is not good at Visual Art is less inclined than the less able Year 8 or Year 9 student to like the subject. This relationship continued to be very strong for both genders.

Table 4.4: Relationships between student attitudes and perceived ability by gender and year level

Relationship between attitudes and perceived ability by gender and year level	Male		Female	Significance
	58.6		52.3	χ^2 p < .001
	Year 8	Year 9	Year 10	Significance
61.7	57.1	25.0	χ^2 p < .001	

The strong relationship between attitudes to subjects and perceived ability in subjects applied also to the level of importance given to factors reported by students as influencing subject choice decisions (Fig 4.6).

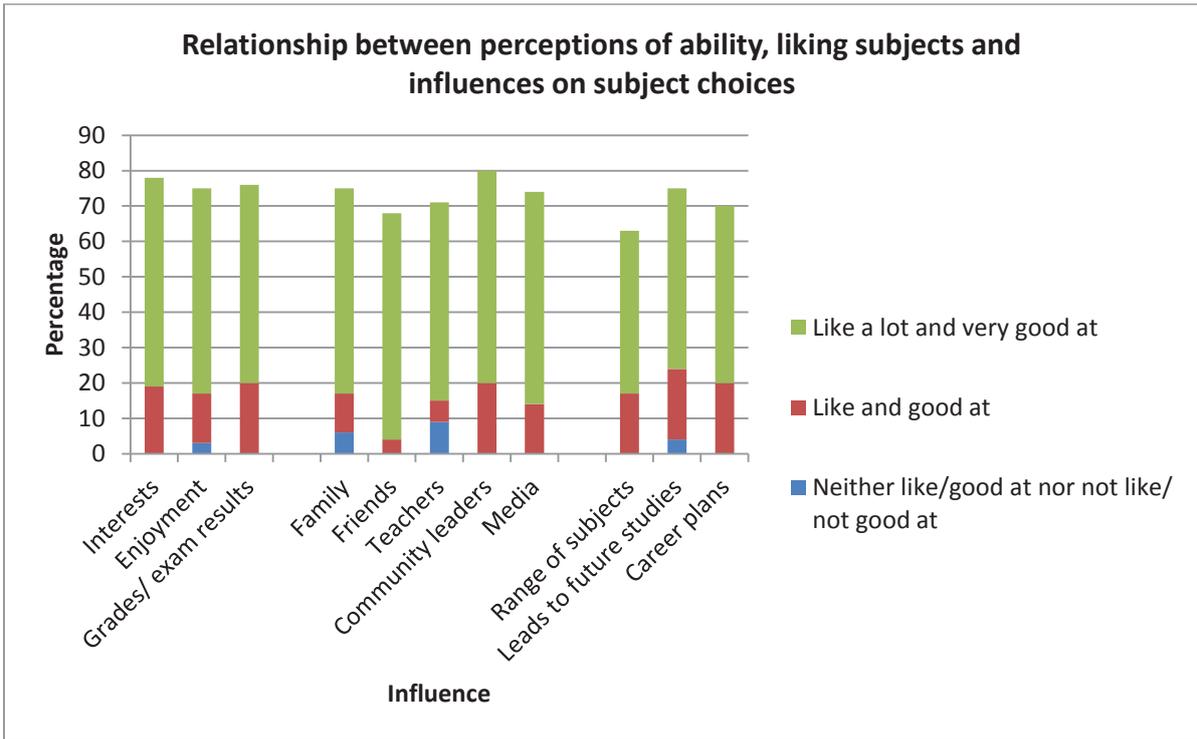


Figure 4.6: Relationship between attitudes, ability perceptions and influences on subject choices

This relationship held across year level, gender and all demographic groups (see Appendix C3.1). Interestingly, students who perceived themselves to be not good at subjects were more likely to be influenced by teachers and family than other students. This finding highlights the important role self-efficacy plays in student decision making.

Subjects were reported as matching student’s interests quite well by 76.5% of parents/caregivers and 72.2% of school staff (see Appendices B1.3 & B1.4).

Parents/caregivers felt that students’ personal attributes, such as personality and skills were important to consider (Fig. 4.7). While both these groups identified what students are good at as of some importance, staff differed in seeing consideration of what students were not good at as also important.

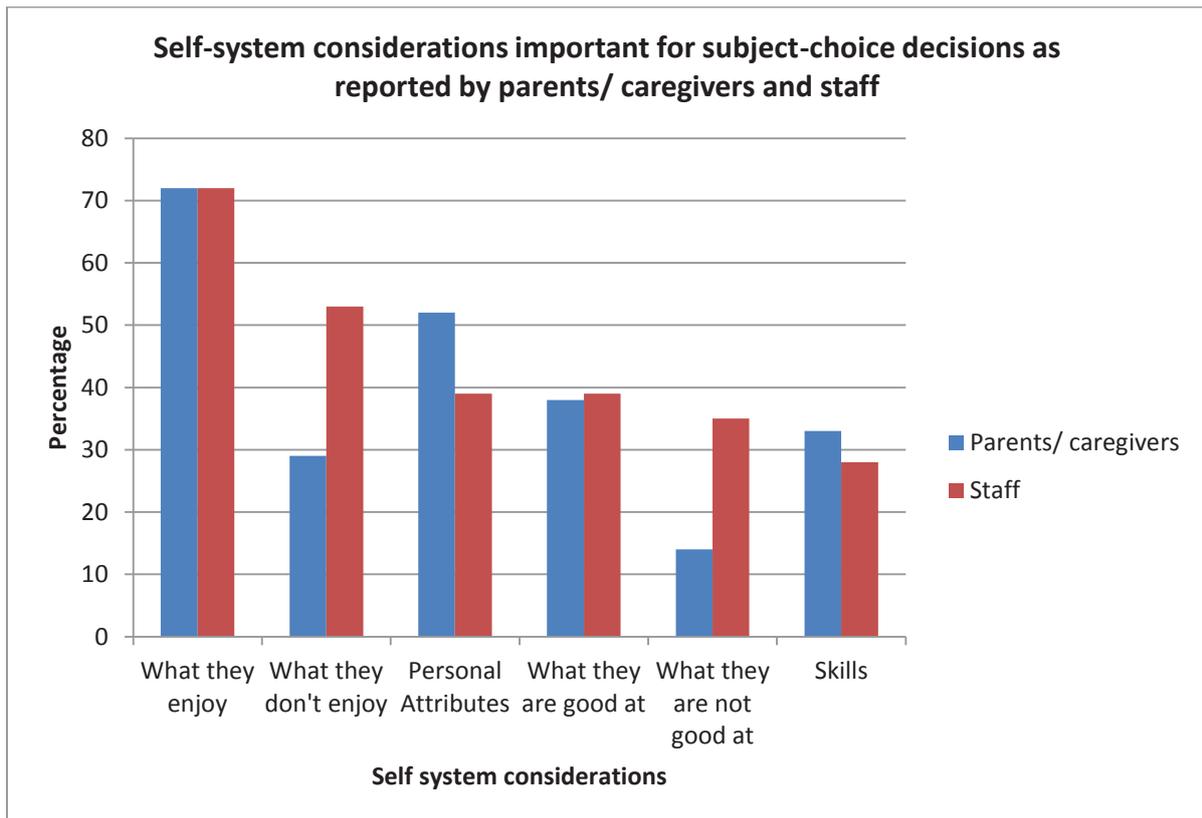


Figure 4.7: Self-system considerations important for subject-choice decisions as reported by parents/caregivers and staff

The school policies (Motuschool, 2012, Motuschool, 2014) stress the need to identify and respond to emerging interests, strengths and aspirations of students. Both government and school documents stress the need to identify ability and potential (MOE, 2009, MOE, 2007, Motuschool, 2012, Motuschool, 2014).

Overwhelmingly, interests were shown to be the main consideration in students selecting particular subjects (Fig. 4.8). Choosing a range of subjects to keep options open for the future and being good at a subject were also factors considered by students in the decision-making process. Teachers were the least important key informant group for students.

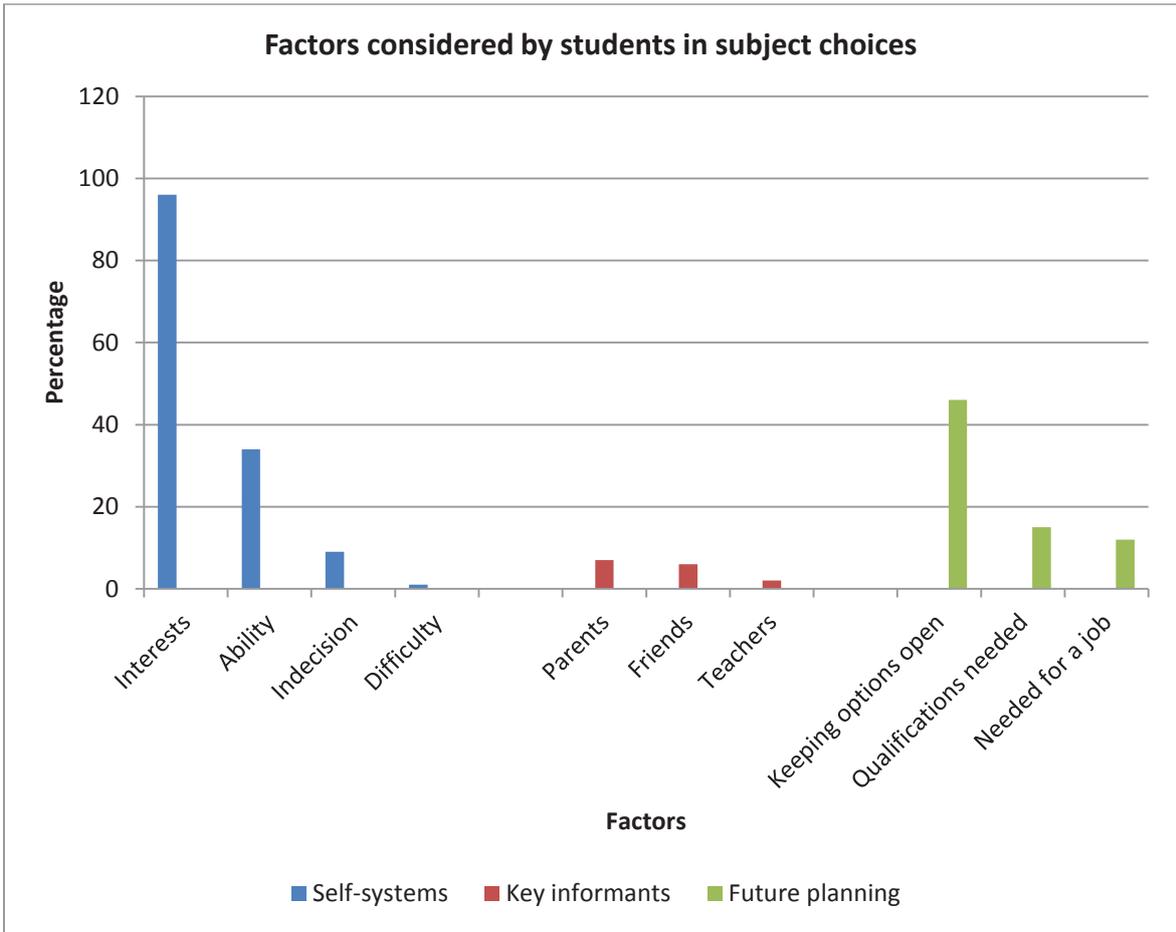


Figure 4.8: Factors considered by students in subject-choice decisions

When the influences on student subject-choice decision making were compared with **actual** considerations when making subject choices, some significant relationships emerged. Students who saw family as an important influence were more likely to think carefully about their decision. However, this group of students also reported that friends were a strong consideration in their subject choice decisions. For students identifying friends as the most important consideration only just over one-fifth gave consideration to what qualifications may be needed for future directions. These students were also less likely to consider parent advice. Surprisingly, students who saw grades as an important consideration did not report choosing subjects because they saw themselves as good at them. While the number of respondents was small, and so the finding is not generalisable, it is interesting to note that students who indicated parents as an important factor in current subject choices were less likely to report media as an important influence.

Year 9 and Year 10 students were asked what factors they had considered in making their current subject choices. When the variables of year level and factors considered in subject choice decisions were examined, some relationships were found (Table 4.5). Being good at a subject and choosing a range of subjects to keep options open for the future became increasingly important as the year level increased.

Table 4.5: Relationship between reported considerations made in subject choices and year level

Factor	Year 9	Year 10	Significance
Choosing a range of subjects	29.2	47.5	χ^2 p = .009
Being good at a subject	24.0	31.1	χ^2 p = .002

There was some significance found for ethnicity; again this must be viewed with caution due to the small numbers of respondents in each category (New Zealand European 224; Asian 54; South African/Other European (29) (Table 4.6). The influence of friends in the decision making process showed some differences, with Asian students more likely to consider friends than students who were New Zealand European and South African/Other.

Table 4.6: Relationship between factors considered for subject choices and ethnicity

Factor	New Zealand European (224 students)	Asian (54 students)	South African/ Other European (29 students)	Significance
Friends	2.3%	9.4%	3.6%	χ^2 p = .014

Parents/caregivers reported the most important consideration for students to make in subject choices was qualifications (Fig. 4.9). While staff agreed with this, they regarded future study plans as equally important. Staff and parents/caregivers agreed on the importance of considering a subject's difficulty, however, parents differed with school staff in seeing a subject's workload as a more important influence on student decision making. Parents could offer a more holistic view of this factor than that seen by individual subject teachers.

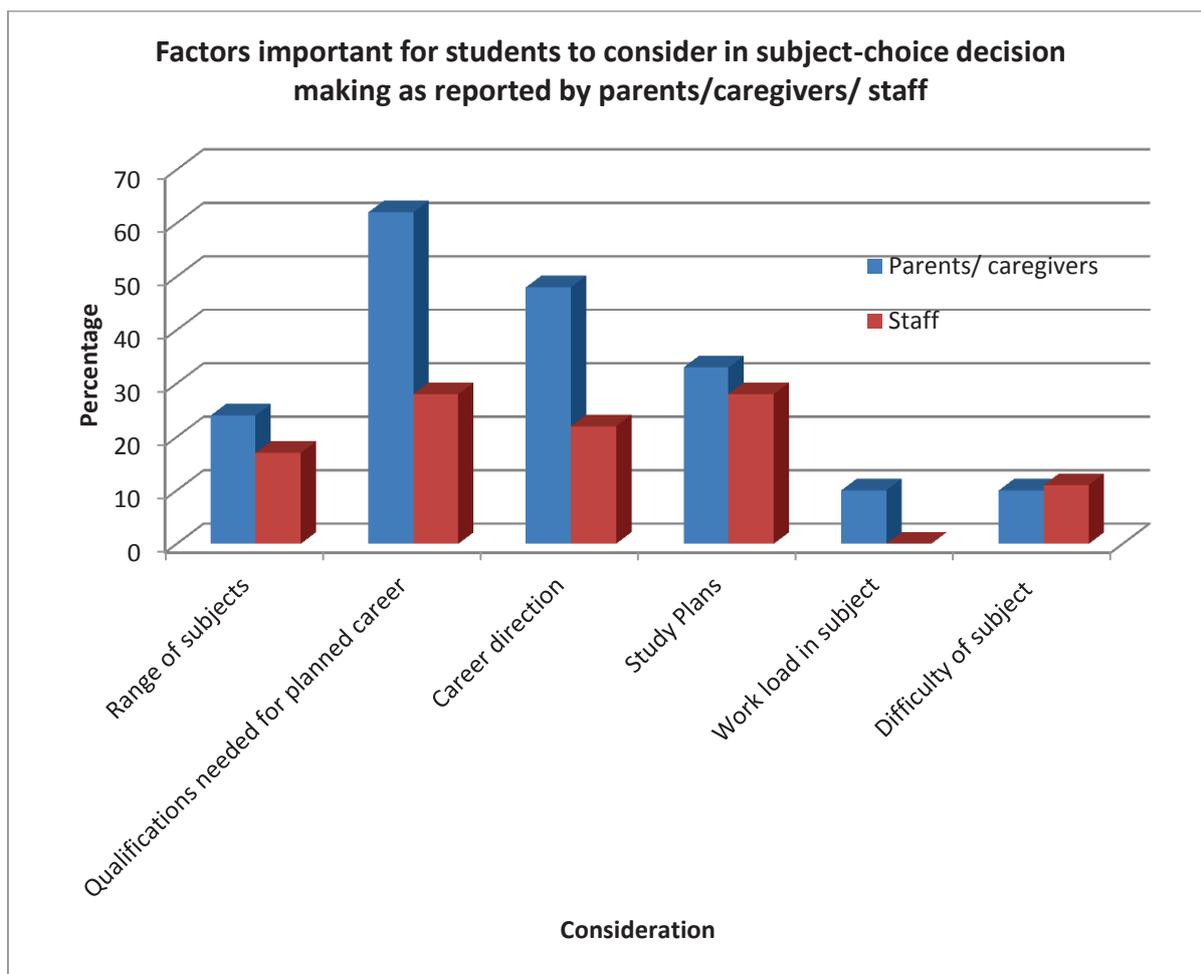


Figure 4.9: Factors important for students to consider in subject-choice decision making as reported by parents/caregivers and staff

Status of subjects

Students spoke of the increasing importance of choosing “sensible subjects”. When asked what subjects were important, interviewed students agreed that these were the core subjects of English and Mathematics. These subjects were seen as the basis of all their school learning. They “determine where you get later on” (Y9B1); “lots of jobs need reading” (Y8G5) and “if you don’t know maths you can’t really do anything (Y8B2)”. Differences in how students viewed optional subjects, such as the Arts and Technologies, were revealed. Some maintained that “option subjects don’t matter” (Y9G7), whereas others saw these subjects as offering specific skills. When students were asked to consider the usefulness of subjects, a close link emerged between subjects and specific skills, particularly those associated with future jobs and careers; for example, digital technologies were seen as providing skills related to the IT industry. However, when asked about the

usefulness of Arts learning, students reflected on benefits beyond the development of practical skills seeing them as making a wider contribution to their well-being; a time when they “get to relax and take your mind off all the stress” (Y8G8). A student summarised the thoughts of many, “I think Art is important because it’s like, learning a way to kinda express yourself... something you can’t do in other subjects” (Y10B8).

General work skills (such as team work or time management) perceived as being developed in a subject were shown as having a significant relationship with ethnicity (Table 4.7). New Zealand European respondents were more likely to consider general work skills important than South African/Other and Asian students. While the small sample size does not allow for generalisation across a wider population, this finding hints at a different approach to determining the status of a subject which would benefit from further investigation.

Table 4.7: Relationship between general work skills consideration in subject status and ethnicity

Consideration	New Zealand European	Asian	South African/Other European	Significance
General work skills	42.4	23.5	33.3	χ^2 p = .019

Changing minds

When speaking about how they will go about their next subject choice students revealed a changing focus; career directions, while referred to by all year levels, became increasingly important to consider as the year level increased. One student summed up the experience common for the Year 9 and Year 10 students. “I remember when I was in Year 8, and when you were choosing your Year 9 subjects all you picked was what you liked or were good at. But then as soon as you had to choose your Year 10 ones you did what you will actually need in life” (Y10G6). One student suggested that, “It’s like you’re preparing for your future job at age 5” (Y10G4). When asked why they would take a subject they didn’t like students suggested that if it led to a future career they would.

Students spoke of the need to be really careful choosing which subjects “to drop”. When Year 9 and Year 10 students were asked whether they had continued with the previous year’s subject choices, 41% of students had. Of those who had changed, the most common reason was that they did not enjoy the subject (Fig.4.10). Not being good at a subject also

influenced decisions to change. School structural factors including timetable clashes, full classes, and a subject not offered that year were further significant reasons for change. Parent direction was a more common reason for changing subjects than teacher recommendation, again highlighting the important role parents have in subject choices.

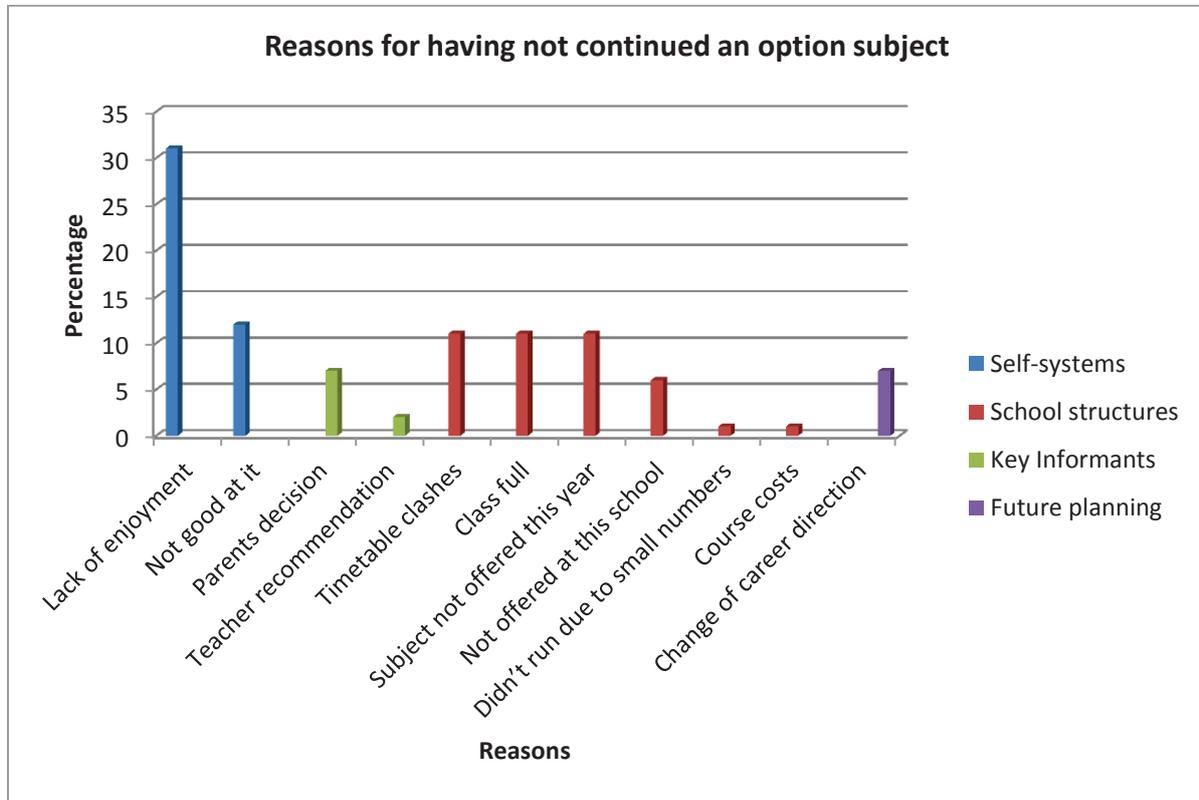


Figure 4.10: Reasons for not continuing with last year's option subjects

When asked whether they would continue with current option subject choices, 39.6% of respondents were planning to, while 35.8% did not yet know what they would do. The main reason for a proposed change was lack of enjoyment, with future planning and study plans also given as reasons. Key informants were not proposed as having a significant influence (Fig. 4.11).

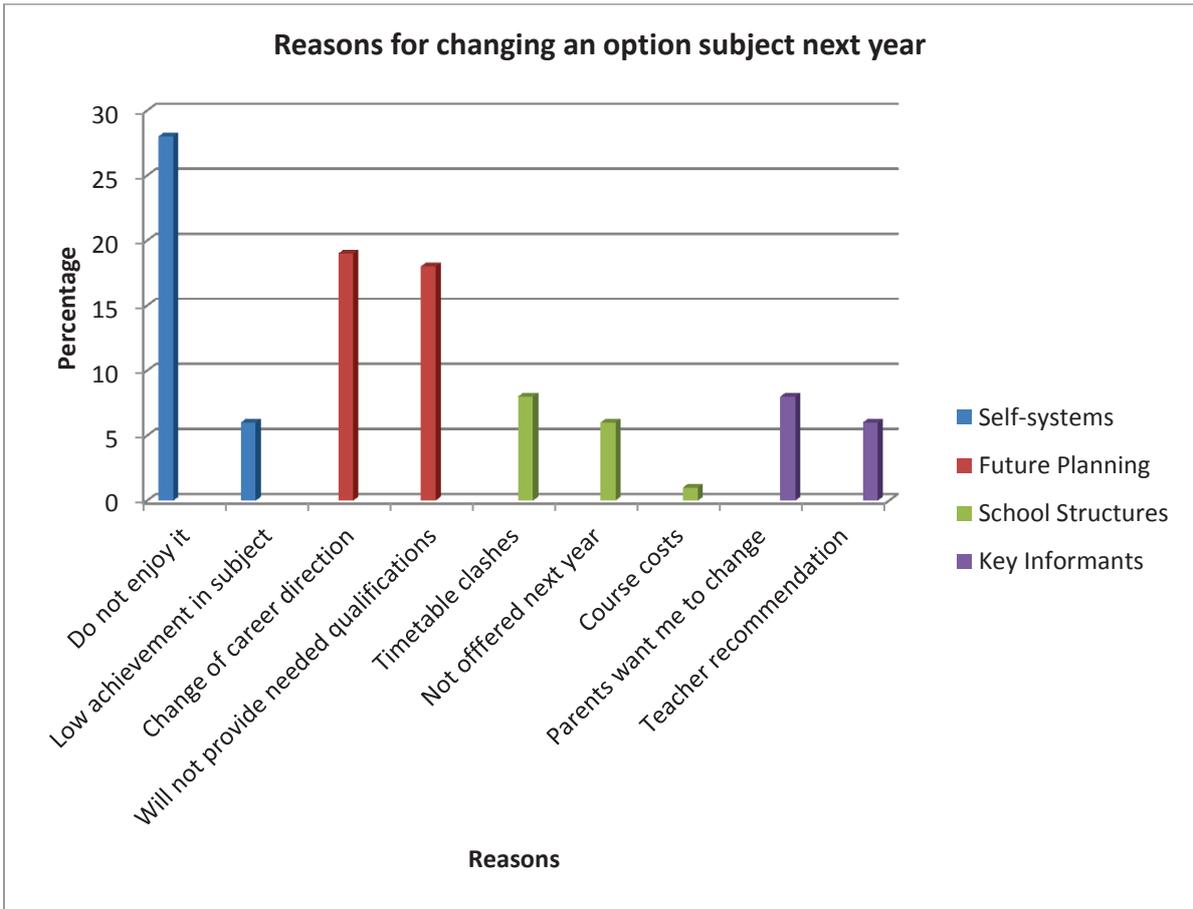


Figure 4.11: Reasons for not continuing with current option subjects next year

Staff were asked to report on why students request to change option subjects (Fig. 4.12). Not enjoying a subject was the most common reason for a student requesting to change a subject, with moving to be with friends the second most common reason. Not being good at a subject, not getting along with the teacher and not completing set work are further common reasons for change. These reasons suggest a lack of engagement with the subject leading to dissatisfaction with their initial choice.

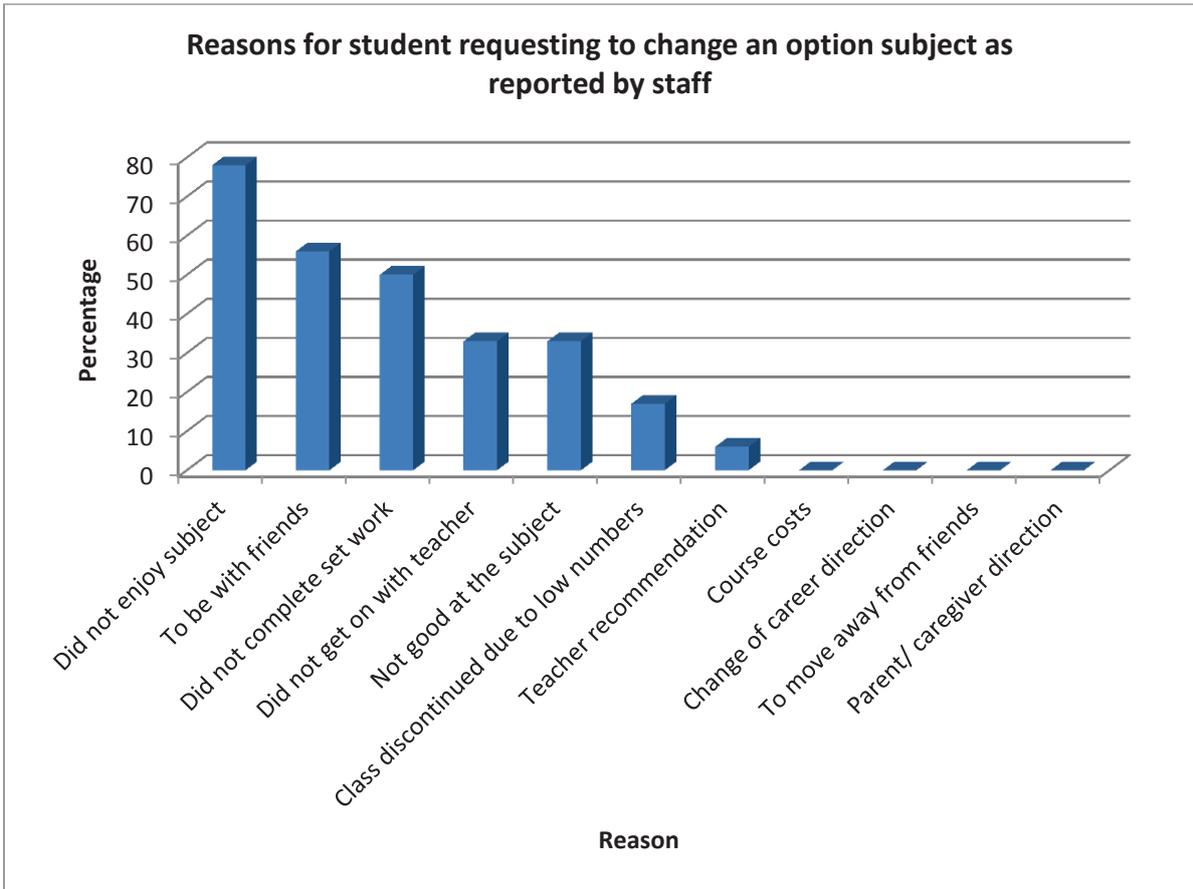


Figure 4.12: Reasons for student requesting to change an option subject as reported by staff

Future study plans

When asked to indicate important considerations for subject choice decisions, qualifications needed for planned career, an idea of career direction and skills and attributes needed for their planned career were considered very important for nearly half of students (Fig. 4.13). However, study plans were seen as of less importance, suggesting a lack of awareness of the need for a carefully constructed learning pathway. This has the potential to result in unsatisfactory decision making.

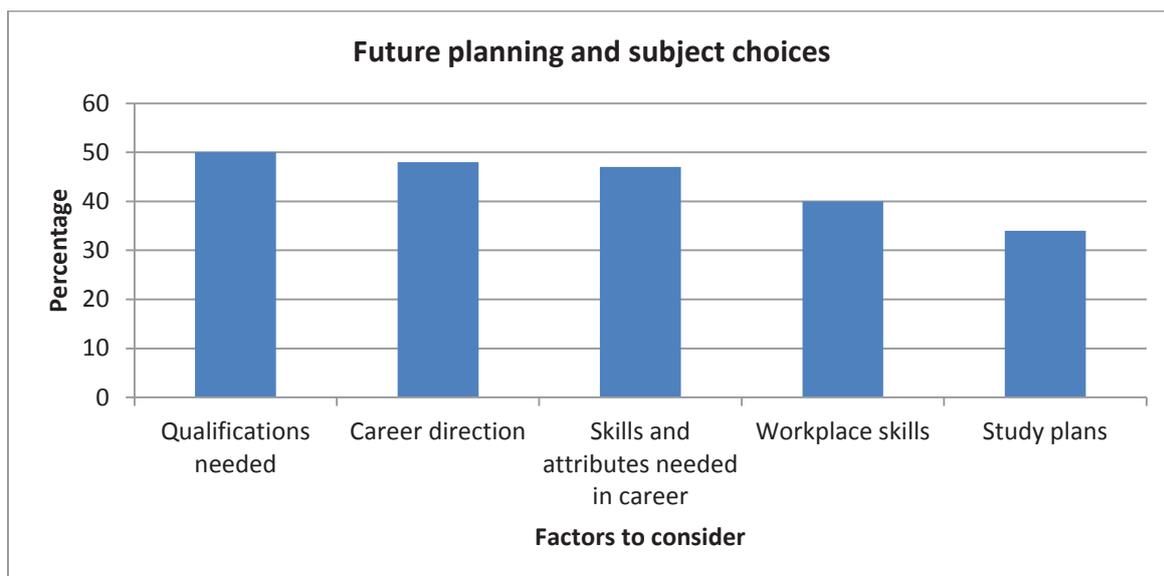


Figure 4.13: Future planning considerations in making subject choice decisions

Some students appeared to have a future goal, however many had little or no idea of what would be required. “I’ve known what I’ve wanted to do ever since Year 7 and I know what I need ... well, not really” (Y10G6). However, many cited an increasing need to work towards achieving academic success because, “next year is NCEA, which is the one that really counts” (Y9B6).

There was some debate from interviewed students as to when subject choices and career decisions started to “matter”. One student commented “I said to myself last year that I’m not going to do anything that I’m not good at [next year] ‘cos the next few years ... it matters what I choose and how I get on in NCEA exams” (Y10G1). Another student advised, “It’s best to start [working hard] as soon as you can ... ‘cos next year it’s NCEA” (Y9 B6). There was a general feeling that Y7 – Y10 was “just practising for NCEA” (Y10B2). Year 8 students saw Year 10 or Year 11 as important because “that’s when you start to think about what I can do and what I can’t; what’s good for me and what’s not” (Y8B1). Year 9 students saw Year 10 and Year 11 as the start of a change of focus from basics to “on what we really want” (Y9B2). Year 10 students reflected, “Well, apparently someone said, ‘you matter now’. That’s when it starts. You have to get your act together now” (Y10G5).

Alongside choosing a subject to benefit future goals, interviewed students identified the need to consider whether to commit to a subject over time, especially to one that was not “liked” or that they perceived they were “not good at”. “I think that if you’re not good at a

subject you should try to improve ... because in some aspects ... you may be very good but some aspects you may not be as good” (Y8G9). Furthermore, students saw the need for sufficient time to be given to develop the skills necessary to become proficient in a subject, and that a longer commitment to the subject was needed to “develop those skills to make them beneficial” (Y8B8). Students also mentioned “not being able to catch up lost years” (Y9B2) of learning in a subject, in particular in relation to their expectations for levels of achievement. “If you get achieved for everything in Year 10 as soon as you go up to Year 11, even if you concentrate you won’t get excellence” (Y10B8). Students also spoke of skills learnt in one subject possibly helping them in another subject in the future. “It’s all important to the end goal ... just everything they teach you is important and it’s not unimportant to the rest” (Y10G4).

Some concerning divergence was found between students’ study plans and their knowledge of qualifications required for their future career pathway (Fig. 4.14). Remaining at school after Year 12 was the plan for 69.9% of students, with 17.3% not knowing yet what they would do after Year 13 (see Appendix B1.2). Two-thirds of students in the questionnaire did not know what qualifications would be required for their chosen career direction or pathway. Three-fifths of the students planned to go on to study for a university qualification when only two-fifths of the students indicated that such a qualification would be necessary for their chosen career (see Appendix B1.2). This would suggest a worrying lack of understanding and awareness of qualifications required for entry to tertiary education and of pathways into the workplace.

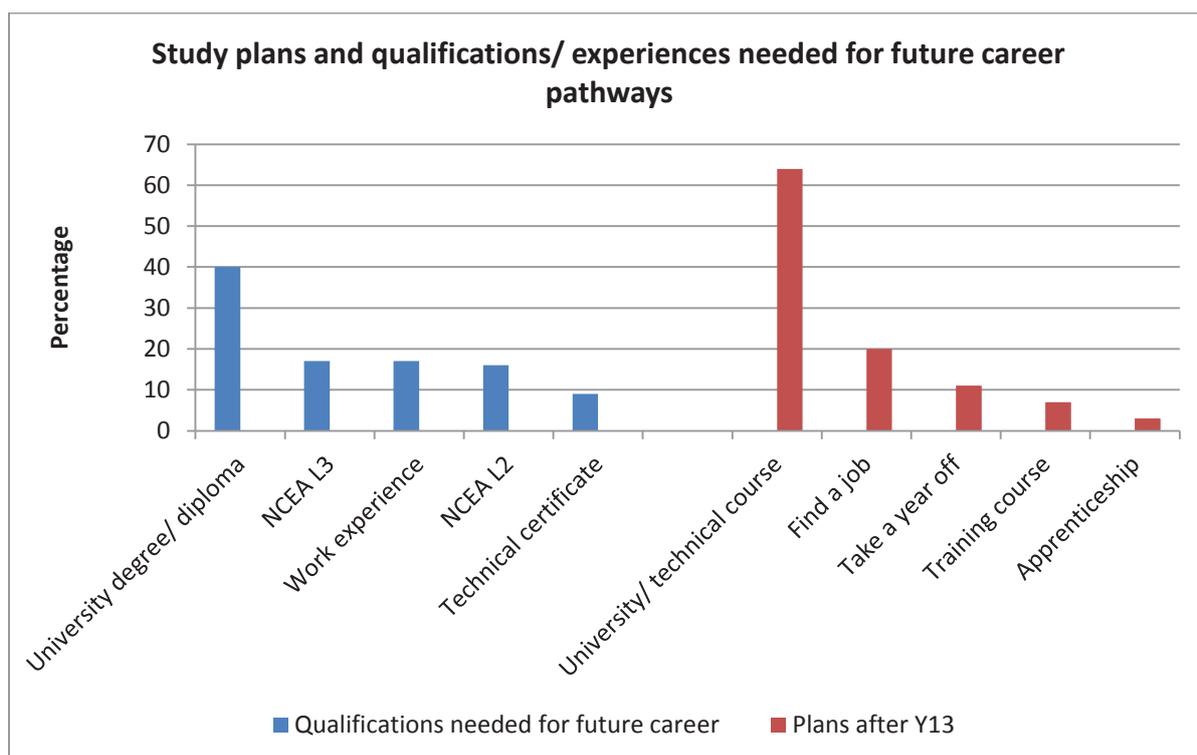


Figure 4.14: Study plans and qualifications needed for future career pathway

When asked to indicate their level of knowledge of NCEA, students’ responses resulted in some concerning statistics (Table 4.8). Over two-fifths of the students surveyed had little or no information on NCEA, with just over one-tenth of respondents reporting having enough. Nearly one-fifth of students did not think it important to have NCEA information at their current year level.

Table 4.8: Student knowledge of NCEA

Knowledge of NCEA %	I have enough information	I have some information	I have little information	I do not have enough information	I do not think it is important at my current year level
Perceived level of knowledge	11.2	26.8	18.7	24.6	18.7

While the impending launch into NCEA was seen as an increasingly important consideration for future subject choices, some students were uncertain as to how much current studies mattered. One student commented, “When you’re in it, in the moment, it feels important but it might not necessarily be” (Y10G4). Another Year 10 student went as far as to suggest

that in Year 10 while “it all matters ... you don’t need to try really hard, you really don’t need to” (Y10G1). All groups saw a definite separation of what happened at the middle school and what would happen in the senior years, with a change of focus towards NCEA achievement and moving on to a future career. Despite acknowledging this change of focus, Year 10 students, and those who plan to transition to a new school after Year 8, did not appear to be giving much consideration as to what subjects they would be able to take at their next school (see Appendices C2.3, C2.4 and C2.5).

Over half of the parent/caregivers group reported that their child planned to stay at school after Year 12 and go to university after Year 13. Parent/caregivers’ knowledge of their child’s future plans after Year 12 decreased (Table 4.9). When parent/caregivers were asked if they agreed with the career direction their child was taking 53% did, however over one-third had not discussed this with their child (see Appendix B1.3).

Table 4.9: Parent knowledge of future plans

Parents reporting of their child’s future plans		
	After Y12 %	After Y13 %
Stay at school	81	NA
Tertiary training course	0	4.8
University	0	71.4
Apprenticeship	0	9.5
Get a job	0	9.5
Gap year	0	0
Don’t know	19	28.6

The study found a mismatch between parent/caregivers understanding of their child’s proposed future plans and the parent/ caregivers’ knowledge of what qualifications they would need to achieve their goal, with a larger number of parents reporting their child planned to go to university than reporting that their child needed a university qualification (Table 4.10). In fact, nearly half of the parent/caregiver group did not know what qualification their child may require. These findings highlight the need for information on qualification structures and future pathways for parents/caregivers.

Table 4.10: Study plans compared to qualification required for their chosen career pathway

Future plans compared to future needs	
Future plans	Knowledge of university qualification

	required for career
Required for proposed career	44.4%
Included in future study plan	71.4%
Don't know what's required	44.4%

KEY INFORMANTS

The people students interact with are critical to their decision making, whether as guides, sources of information or role models. Overall parents had been the most common informants for student subject choices (Fig. 4.15), with friends also an important source of information. Subject teachers were the most used school staff informant. The Career Education Benchmarks – Year 7 and 8 (2013) expects students to be able to identify support people and explain how these support people can assist with change and setbacks.

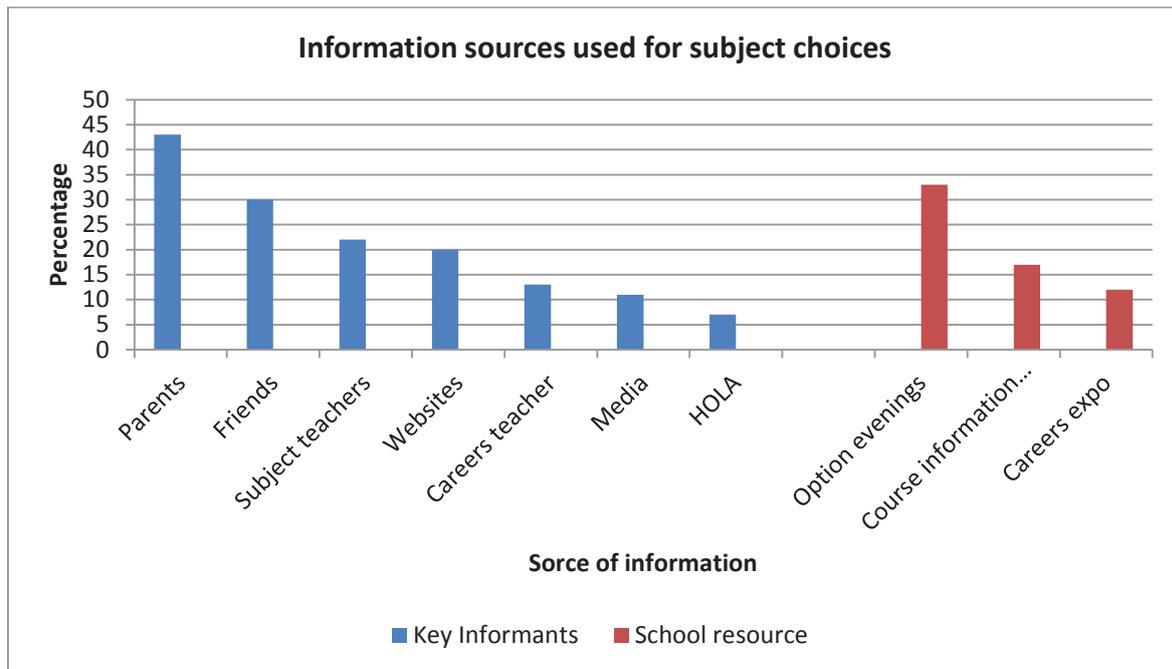


Figure 4.15: Information sources used in subject choices

However, the people who influence students' decision making can make the process even more confusing; "with the pressure from their parents, with them wanting them to do one thing and their friends wanting them to do another, and they want to be with their friends but they know they should obey their parents ..., they don't really know what to do, what to choose" (Y9B2).

Parents

While 53.9% of students' reported that their parents liked their subject choices, 29.3% reported that their parents did not mind what they chose (see Appendix B1.2). Furthermore, there was a relationship between year level and students reporting parents as an information source with use lessening as year level rises (Table 4.11).

Table 4.11: Relationships between parents as an information source and year level

Parents as an information source	Year 8	Year9	Year10	Significance
	48.0	46.9	33.0	χ^2 p = .018

While students suggested that they made their own choices the interviewed students indicated that parents had some involvement, with students saying they had discussed, albeit briefly, their future plans with their parents (see Appendices C2.3, C2.4 and C2.5). When speaking of making subject choices students frequently referred to parent experiences as examples; "my Mum did", "my Dad, he chose", and "my Dad wanted to do" (see Appendices C2.3, C2.4 and C2.5). For some, a choice was made and parents "gave the opinion on whether it was a good choice for them" (Y9B6). For others, parents suggested some subjects and then allowed students to choose "one fun one". Students justified this by saying, "they try to set me up for the future" (Y10G6). Students also spoke of parents knowing that they were good at something, "so they kind of make me do that" (Y10B3). Other parents limited the choices by not allowing the students to do any "useless subjects." One student commented that, "My Mum wanted me to do Art, so I took it 'cos she likes art. (Y10G5). In some cases, it was difficult to determine who had made the choice, "my dad ... he wanted to do computers and stuff. He told me he'd like me to do Digi. I didn't *have* to, so, I did it. It's not as bad as ... I think I'll probably do it again" (Y9G8). Even when students stated that they were not intending to go down a parent-driven path, they admitted that they would consider their parent's advice to help them make their decision. "If I'm gonna change to the wrong subject they might say, well that's probably not the best idea" (Y10G1). Parents were seen to be the expert advisors, they have "had an experience with going into finding jobs and they've been to university" (Y8G9). While some students were not sure of their parents' views, others felt their parents had no influence. They reported parents as

saying “Do what you want to do... do what you think you should do. They don’t have any say and they don’t want to have any say” (Y10G1).

The situation for English Speakers of Other languages (ESOL) students is more complicated. They reported having to be the mediators of information to their parents. All had had conversations with their parents about subject choices. All felt their parents would “respect” their choices. “My Mum and Dad don’t speak English so, they respect, let me, like - everything that’s useful for the future, I will, tell them in my language and then they will decide whether that one is good or not” (Y10B9). While on the one hand this may empower the students to make their own subject choice decisions, it also burdens them with being the primary disseminator of information to their parents. These parents get pre-filtered information reliant on the students’ sources and interpretation of information which may not always be unbiased or accurate.

Peers

Siblings were also found to play a role in subject choice decision making, whether through providing background information for choice making or through direct involvement in the decision making process. “How I chose was my older brother got options and they got descriptions... me and my parents and also my older brother, we all sat around and it really didn’t take that long. I knew I wanted to be an architect so ...my brother recommended some. So like, okay, these are okay and we chose it. So that was decided” (YG7).

Friends and older students played an important role in providing information students used to help make decisions. Students had “talked to their friends a bit” (Y10G6) and these friends had told them “what were good subjects to choose” (Y9B6). While students warned “don’t choose an option because your friends are there”, “to be with friends” was also given as a motivation for taking a subject that they did not like (see Appendices C2.3, C2.4 and C2.5).

Furthermore as one student explained “if they [friends] all went into one subject, then I’d choose that subject and that would make me like it more ‘cos there’d be friends. If you enjoyed it, you’d enjoy coming to school” (Y8G9). Interviewed students also talked about peer pressure; “Say you choose like, film but all your friends do sports science and they’re like, ‘come and do sports science. It’s way more fun” (Y9B2). Others encouraged an

independent choice by suggesting that new friends would be made in the option classes (see Appendices C2.3, C2.4 and C2.5).

Teachers

While teachers were not identified by students as directly influencing subject choices in the questionnaire survey, how they interact with students and the atmosphere in a teacher's classroom were mentioned in the interviews. "If you don't get on with someone you avoid them and don't listen to them, but if you get on with someone you listen to them and you enjoy spending time with them" (Y9B2). Teachers who understood their needs were central, with the relationship between students and teachers an important factor. "I try harder ... with teachers I get on better with" (Y9B6). The level of interaction in a class, whether "it's social", was seen by students as an important consideration in subject choices. Teaching methods played a role in this. While some students preferred independent work, others preferred group situations. Furthermore, students commented on being able to "build a better bond" (Y8G4) with teachers they had greater contact with such as their home room teachers. Year 10 students saw this bond being more closely made with their Whānau teachers. This is important information for schools to consider when looking at provision of information and support for students making subject choice decisions.

Students saw specialist subject teachers as particularly influencing their enjoyment of a subject. "They're passionate about their subject, so it makes a bigger difference in their teaching style" (Y8B2). They are seen to "know more", "teach it so much better" and are more able to "actually help you ... and extend you".

The school Option Policy (2012) identifies Whānau (Home room) teachers as the first source of information for students wanting advice on making subject choices. The Heads of Learning Areas (HOLAs) are seen as an option where specific subject information is required. The Careers Teacher is suggested as a source of advice if a student is still unsure. However, the assigning of the role of advisor to these individuals assumes that these staff members have the knowledge and expertise to advise students, a situation which the study findings suggests is not necessarily the case (Fig. 4.16). While academic counselling is strong in secondary schools, only 8% of schools surveyed provide careers education and guidance at the Year 9 and Year 10 levels (ERO, 2015). While ERO (2015) found that 90% of teachers say they talk to their students about the links between their subject and careers, they identify a

need for home room teachers and subject teachers to be up-skilled in guiding students for learning pathways. Resources are required to assist them in this. School wide-professional development is seen as the best way to develop knowledge and understanding of their role in careers education (ERO, 2015).

Who goes to whom for advice?

All groups in the study were asked who they would approach to get information to assist them to make subject choice decisions. Overall, parents were the most (72.2%) likely people students would turn to for advice on subject choices (see Appendix B1.2). Other family members (48.4%) and friends (40.3%) were the next most likely.

There was some relationship found between year level and who students would approach for advice (Table 4.12). Year 8 students were more likely to approach their Whānau teacher than Year 9 or Year 10 students and were most likely to approach parents.

Table 4.12: Relationships between who they would approach for subject choice advice and year level

Who to approach	Year 8	Year 9	Year 10	Significance
Parents	79.2	68.8	66.3	χ^2 p = .044
Whānau teacher	17.1	12.5	10.6	χ^2 p = .005

Gender also showed some relationship to who was approached for advice, with female students less likely to know who to approach for advice than male students (Table 4.13). While of lower significance, whānau teachers were more likely to be approached by male students than female students.

Table 4.13: Relationships between who they would approach for advice on subject choice and gender

Who to approach	Male	Female	Significance
Don't know who to approach	5.6	16.7	χ^2 p = .045
Whānau teachers	17.6	11.2	χ^2 p = .055

Who students were most likely to approach for information to help them make subject choices showed some variations for ethnicity (Table 4.14). Community leaders, Heads of Learning Areas (HOLA's) and students in higher classes were perceived differently by the different ethnic groups. While again these findings cannot be generalised due to small

numbers, this area is worthy of consideration to ensure all students are given appropriate and current information to assist them to make educational decisions.

Table 4.14: Relationships between who they would approach for advice on subject choice and ethnicity

Resource	New Zealand European	Asian	South African/Other European	Significance
Community leaders	38.7	55.1	36.0	χ^2 p = .024
HOLA	13.7	13.7	15.4	χ^2 p = .032
Students in higher classes	16.2	24.0	38.5	χ^2 p = .041

Subject teachers were also the most likely source of information parents/caregivers and staff would direct students to for assistance with subject choices, with family members the next most likely information source. (Table 4.15) Despite Whānau teachers being suggested in school documents as a source of information, they least likely source of information suggested by both groups. Students in higher classes were suggested as likely sources to direct students to for information by nearly half of parent/caregivers and staff.

Table 4.15: Likelihood of directing student to source for advice

Sources of information	%					
	Yes		Maybe		No	
	Parent/caregiver	Staff	Parent/caregiver	Staff	Parent/caregiver	Staff
Subject teachers	76.2%	88.5	14.3	11.5	9.5	0
Family members	71.4	52.9	28.6	47.1	0	0
Whānau teachers	40.0	22.2	30.0	44.4	30	33.3
HOLA	66.7	61.1	23.8	27.8	9.5	11.1
Careers teacher	61.9	47.1	33.3	41.2	4.8	11.8
Students in higher classes	47.6	47.1	38.1	41.2	14.3	11.8
Next year's teachers	42.9	11.8	33.3	47.1	23.8	41.2

These findings highlight the need for schools to consider gender, year level and ethnicity factors when developing provision of information to support students, family and whānau to make subject choice decisions.

INFORMATION AND RESOURCES

When asked in the questionnaire about the information they had for making subject choices, 35.6% of students felt they had enough information. However, 26.2 % felt they had little or no information on which to base subject choices (see Appendix B1.2). When the data were analysed using year level grouping, a very strong relationship was found between year level and the adequacy of information to make subject choices, with students in higher classes feeling less well informed (Table 4.16).

Table 4.16: Having enough information to make subject choices by year level

Have enough information to make subject choices %	Year 8	Year9	Year10	Significance
	10.1	1.0	3.0	χ^2 p <001

Whether this was due to an increased awareness of the wider opportunities for the future and/or an increased concern for their approaching senior study years, was not able to be determined in this study. The strong relationship found between the information level of students and gender, with a greater percentage of males feeling they had all or some information needed while females reported a lower level of information would be valuable to consider when providing support for subject choices (Table 4.17).

Table 4.17: Relationships between information level and gender

Very high/High level of information %	Male	Female	Significance
	50.3	30.9	χ^2 p <001

Information levels and confidence to make decisions

Overall 23.7% of questionnaire respondents reported feeling very confident about making subject choice decisions and 50.8% feeling confident (see Appendix B1.2). However, comparison of gender and level of confidence variables found that female students were less likely to feel confident than male students (Table 4.18). This corresponds with data showing female students feeling themselves as having less information to help them make

choices and more likely to not know who to go to find information than their male counterparts. This is an important finding with implications for school processes for informing students and facilitating subject choice decision making for female students.

Table 4.18: Comparison of subject choice decisions, information use and gender

	Male	Female	Significance
High level of confidence %	18.4	31.7	χ^2 p = .002
Level of information %	50.3	30.9	χ^2 p = .002
Do not know where to go for information %	5.6	16.7	χ^2 p = .045

The questionnaire asked students to choose the information sources they had used or planned to use to make subject choice decisions (see Appendix B1.1, Q 13). While the small sample size did not allow for generalisation across a wider population, ethnicity showed a significant relationship with several information sources (Table 4.19). Course information booklets, the careers teacher, subject teachers and websites showed difference in use across the groups suggesting a need to consider these in order to enable improved access to a wider group of people.

Table 4.19: Significant relationships found between use of information resources and ethnicity and gender

Resource	New Zealand European	Asian	South African/Other European	Significance
Course information booklets	11.9	27.1	32.0	χ^2 p = .014
Subject teachers	20.1	18.4	42.3	χ^2 p = .038
Careers teacher	9	21	19	χ^2 p = .033
Careers expos	10.6	14.6	16.0	χ^2 p = .042
Websites	14.8	29.8	23.1	χ^2 p = .045

A limited number of information resources had been accessed by parents/caregivers, with the most useful indicated as being subject teachers and option evenings. More staff had made use of external information sources, with NCEA information sources and careers websites found useful (Table 4.20).

Table 4.20: Resources found useful by parents/caregivers and staff on assisting students to make subject-choice decisions

Resources used	Very useful/Useful		Neither useful /not useful		Have not used this resource	
	Parents/caregiver	Staff	Parents/caregiver	Staff	Parents/caregiver	Staff
Subject teachers	75	82	10	18	15	0
Option evenings	75	89	10	6	15	6
Course information booklets	70	94	0	0	30	6
HOLA	55	89	25	11	20	0
Career expos	55	47	15	24	35	30
Career websites	55	71	15	18	35	12
Careers teacher	40	41	25	41	35	18
NCEA information sources	35	65	30	24	35	12
Friends	35	12	45	77	20	12
Whānau teachers	25	18	45	70	30	12
Media	10	35	50	53	40	12

Information types focusing on future pathways, such as course information booklets and Careers Expos, were reported as being very useful or useful by both groups (Table 4.21).

Table 4.21: Information seen by parents/caregivers and staff as helpful for students to make subject-choice decisions

Type of information	Very helpful/helpful %		Neither helpful /not helpful %	
	Parents/caregivers	Staff	Parents/caregivers	Staff
Qualifications subject leads to	94	83	6	17
Information on jobs subject can lead to	100	82	0	18
Information on entry to tertiary institutions	91	89	9	11
Workload in subject	86	78	14	22

There was a strong relationship found between students having enough information to choose subjects and their level of confidence to make subject choices (Table 4.22). The relationship increased as the year level rises.

Table 4.22: Relationships between information level and confidence to make subject-choice decisions

Having sufficient information and feeling confident to make subject choice decisions%	Male		Female		Significance
	55.4		39.6		χ^2 p < .001
	Year 8	Year9	Year10		Significance
	37.0	49.0	52.9		χ^2 p < .001

Overall, staff in the survey reported feeling more confident to advise students on subject choices than parents/caregivers. However, given the confidence both groups expressed, it is somewhat concerning that 71.4% of parents/caregivers and 38.6% of staff reported having little or not enough information on NCEA pathways (Fig. 4.16). How accurate is the advice they are giving to students?

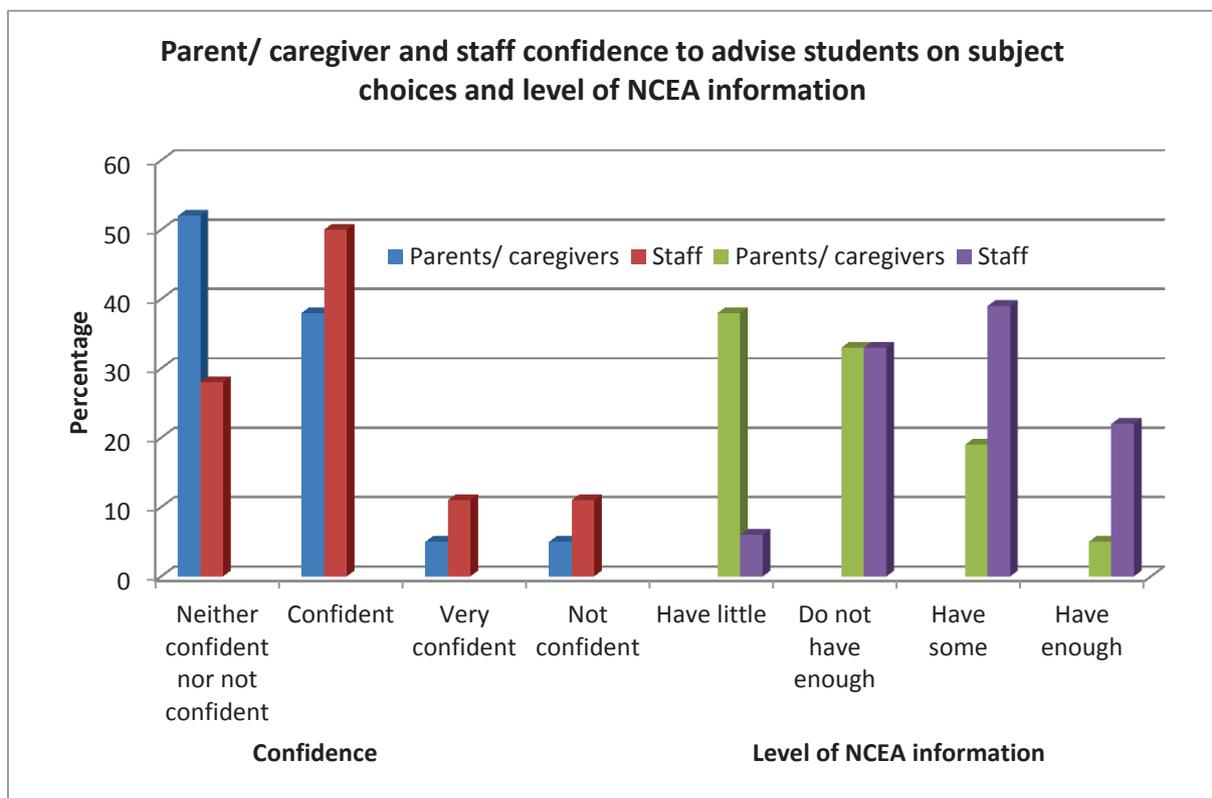


Figure 4.16: Parent/caregiver and staff confidence to advise students on subject choices and level of NCEA information

School option evenings

School option evenings were reported as the most useful format for receiving subject choice information by all groups in the study (see Appendices B1, C2.3, C2.4 & C2.5). Furthermore, the option evening appeared to be a catalyst for discussions about option subjects with parents. However, students in the Year 10 interview group issued warnings that the information collected from this source may not provide the whole picture. "It's quite easy to show something as it's not in this day and age ... It's quite easy to put a smile on someone's face. It's like with food. It's not just pure cooking, you have to make your own recipes and that, but at the open evening they had food going out nonstop....It gives people a false sense of what's going to happen" (Y9B2). As one student said, "They show the positive. They don't show the negatives. They just show the good bits" (Y10G6). One student summed up their experience, "I went to the options evening and thought this was so cool that I took it and I am completely - I am drowning. I don't know what to do" (Y10G1).

Careers Expos

Year 10 interviewed students had attended the Careers Expo and had found it a useful source of information. However there was also the wish that they had been given this information earlier; "Now I've been to the Careers Expo, I'm like, oh, I could have taken that ... It would have made my life a whole lot easier next year, for every year" (Y10G1). The Careers Expo was also mentioned as motivating students to talk about future plans with their parents (see Appendices C2.3, C2.4 and C2.5).

FUTURE PLANNING

This study identified direct links between subject choices and career planning (see Appendix B1.2). Government agencies insist that coherency in provision of information on learning pathways and career is important (MOE, 2007; MOE, 2009; ERO, 2015). Furthermore, an individualised approach was identified as most effective, especially for low achieving students. However, while some students made direct links between subjects and future jobs others did not necessarily link current learning with skills needed for the future. "I don't think much of what we do now, unless it's a job we need to be taught at school, that those are gonna be any good" (Y9B1).

Possible selves and careers

In the questionnaire over half (53.3%) of the students reported they that had decided on a future career pathway. Students were able to give suggestions of a future self. “My 6-year-old-self wanted to be a fashion designer” (Y10G1). Students spoke of “wanting to be”, “wanting to do” things or wanting to “go around as”. Despite, “all the things that you could do with just one skills base” (Y10G1), the traditional occupations, such as policeman, pilot, lawyer, and armed forces, were the most common given. Other choices may reflect the influence of media (e.g. chefs, detectives, stunt men, actors) and our modern workplace (e.g. ‘IT guys’, sports managers and professional trainers). Still others held the view that their dream job was unattainable; “What I want to do isn’t very realistic” (Y10G5). So what influences students when considering career choices and where do they get their ‘clues’ to develop their concepts of future selves?

Interests, personalities and passion featured strongly in these middle school students’ choices of career pathways (Fig. 4.17). “I think I would be a pilot because I really love to travel and I have a passion for planes... and I really like public speaking so that would be a good reason for me to be an auctioneer” (Y8B2). While less prominent, the mention of the desire to serve a common good also featured. One student talked of a potential job being “really rewarding” and believed that it would make you “feel good after it” (Y8G8).

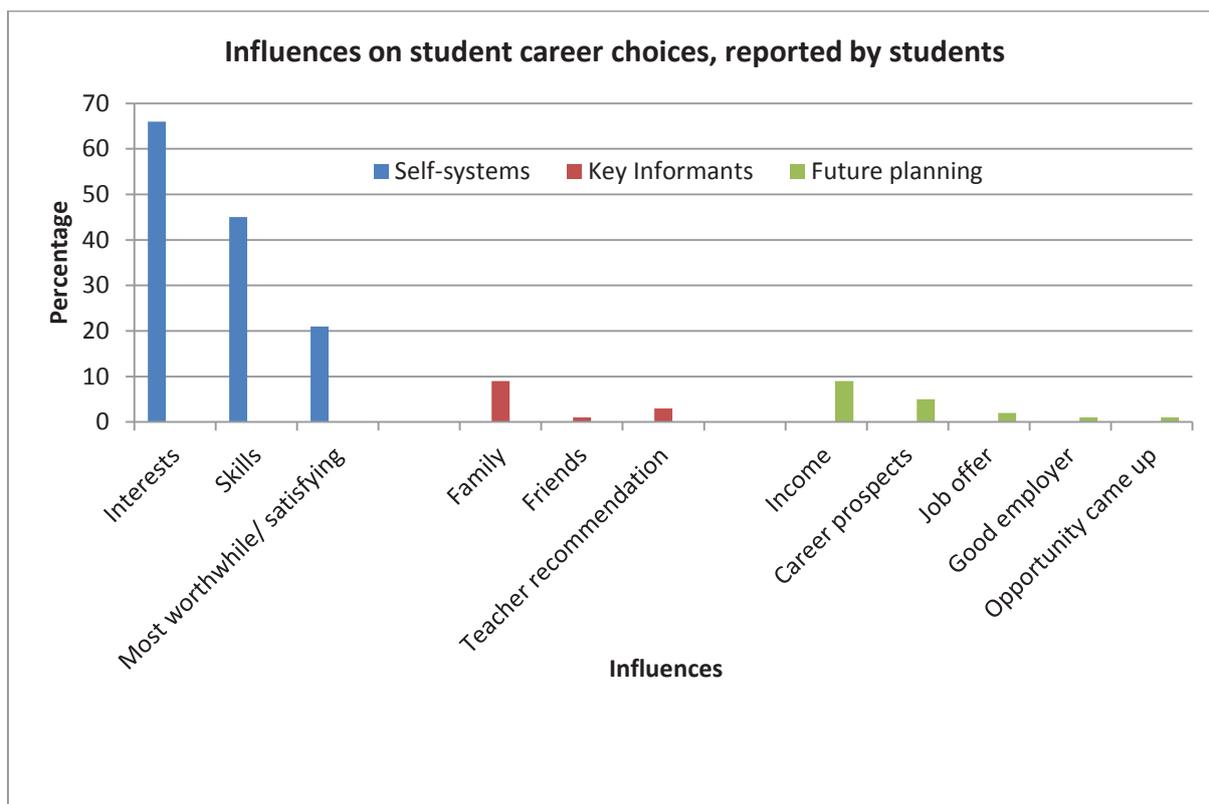


Figure 4.17: Influences on students choosing career pathways

Few (23.3%) students provided alternative pathways (see Appendix B1.2). Interviewed students made comments about having to change direction because of a perceived lack of ability; “In Year 9 I try to be an IT guy but then it turns out ... I’m not very good at it” (Y10B9). One student recounted having a chosen pathway for some time only to find that a minor physical disability prevented them taking up that career.

Careers information

Family was reported as the most important information source for students choosing career pathways. Parents in particular, appeared to play a role; especially in terms of guiding their child towards a career pathway or providing opportunities to gain experience of a job. “That’s kind of how I found out what I was going to do, by hanging around my parents” (Y10G6). Parental influence was not always reported by students as a positive contribution to this decision making. Students talked of parents “trying to convince me ... my family wants me to” (Y10G5) and “my Mum will really push me to be” (Y8B1). “We just argued because I was expecting something different from the job. She ... thought it wasn’t what I thought it was going to be” (Y9G9).

Wider family or wider friend networks were also seen as inspiring students to follow a particular pathway. Students mentioned uncles, aunts, grandparents and older siblings as motivators to explore a career. Most students had visited at least one of their parents' workplaces and for many this had been a critical opportunity to develop ideas about a future career. Alternatively such a visit may have convinced them to not take that path. "I've gone to my Dad's work and although it's reality, I really don't want to do it" (Y10G5).

Past school experiences were also mentioned as having influenced students, particularly visits to workplaces, opportunities to talk with workers and observe what they did. "In Year 6 we went to a studio ... I asked one of the animators what it was like and what you need to be able to work as an animator" (Y8G5). Topics studied in a school subject had also provided inspiration. "Last year we did this integrated study about Ebola and then I did about [the] human body - what if it gets it ... I was very interested, so I want to learn more about the human body, so I chose a doctor" (Y8G10).

While having decided on a career path, students perceptions of a certain job can be limited and based on less than rigorous sources of information. "I think a lot of kids know what they want to do at this age 'cos they've seen it all on TV" (Y9B2). Students wanting to become stunt men and chefs referred to media in their interviews and were unable to give further information on what doing the job might entail or what qualities may be required other than comments such as "to be active and being outside" (Y9B6). One student wanting to be an actor justified the choice by stating that it is a "cool thing to be" (Y10B7). The detective stated that "you get a lot of action ... and it's a lot more mysterious than some other jobs" (Y8B7).

Students also reported having used websites to research possible careers, "I got mine off the internet" (Y9G9) and to finding them "really handy" (Y8B3). However, how appropriate and accurate the information students gained from these sites was questionable, relying as the websites do on the participant having an awareness and understanding of their own abilities and personality, a difficult ask for a developing adolescent. One student described their experience of using the website to record their personal information and the resulting information they received: "It tells you what you want to be, what you can choose. You have to scratch it and then ... it goes into the boxes and if you scrape it all, well, it tells you what is good for you. It told me they work long hours and don't get paid that much" (Y8G10).

However they assured me that the test was accurate as they had “done it twice and it came up with the same thing”.

Both parent and staff groups saw interests as the most important consideration for students to take into account when considering career directions (Fig. 4.18). Long term well-being, in the form of satisfaction with a chosen pathway, was also seen as very important by staff. Parents placed equal value on their child’s well-being and the skills they saw their child as having. Collaboration between parents/caregivers and the school could provide valuable information to students to develop study plans, especially in encouraging students to take up the challenge of learning new and possibly perceived as difficult skills which can assist them to reach a long term goal.

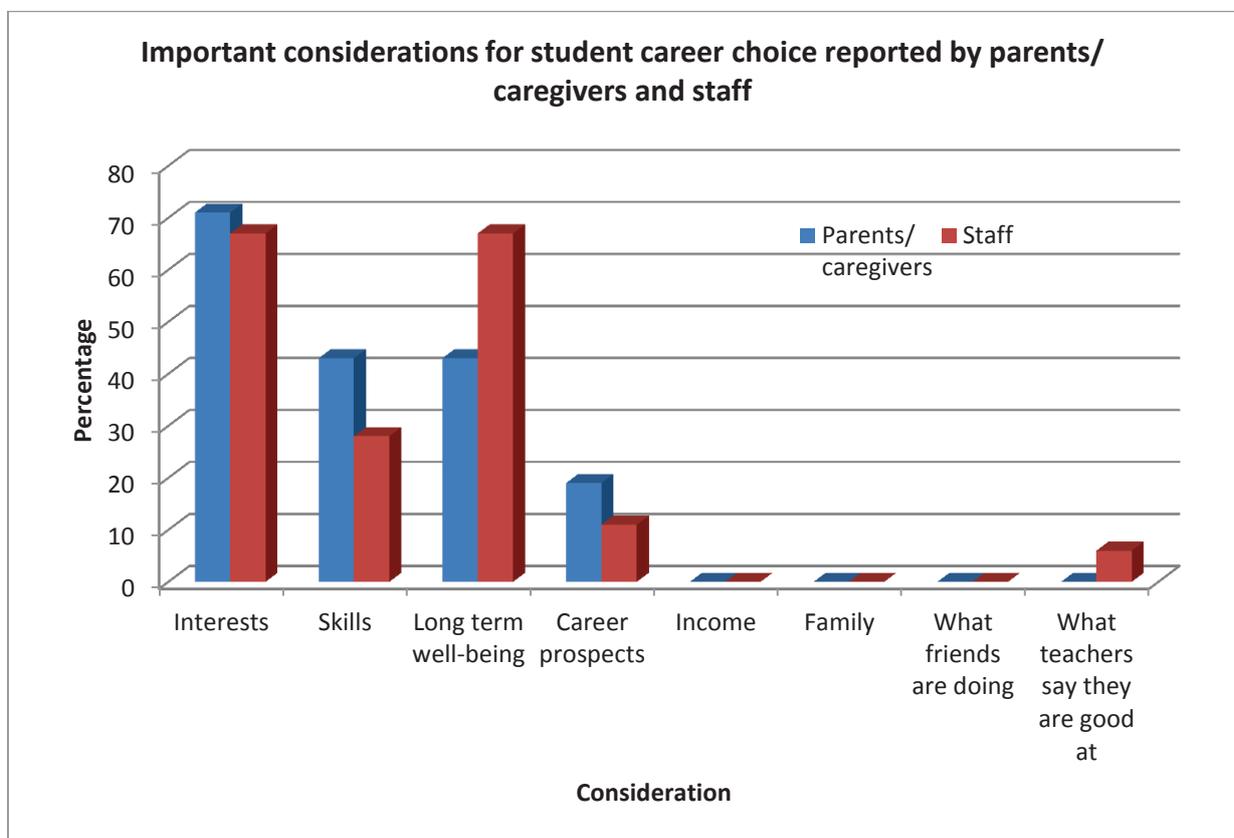


Figure 4.18: Important considerations for student career choice reported by parents/caregivers and staff

TRANSITION

In general, the Year 10 students had made very little effort to find out about subjects available at their next school, and given the stand-alone nature of their current school, access to this information in the school environment was limited. None were able to give

information as to what entry requirements there may be for subjects at their next school. For the most part, what information had been gleaned was from siblings or friends' siblings; Indeed, "Everyone here at least knows one person that has been to [school name] and they've probably talked about it. They know what they've done, they know if they've liked it, what the teachers are like" (Y10G6). However, one student warned, "But those people who go to the school are really biased" (Y10G4). One student had attempted to find information through the next school's website, but "I didn't find what they offered. I just saw pictures to be honest ... and they were five years old" (Y10G5). So not only is the information students are using to make their choices mediated through the eyes of others but it may not even be current.

While students expressed definite preferences in which would be their next school, most (7/10) students in the Year 10 group had not made a decision (see Appendix C2.5). This was an area where students seemed to accept that parents would make the final decision. The decision appeared to centre on whether the next school would encourage the achievement of high grades and the concern parents had for the "reputation" of the school particularly in terms of not "getting into the wrong crowd". Several students revealed that parents had "made a deal" with them. If grades "drop" they would be sent to a school which may not be the student's first choice. One student spoke of peer pressure with friends commenting, "But why would you go to [school name] when you could go to [school name]" (Y10G4)?

SCHOOL STRUCTURES

Many (69.7%) students reported not being able to take a chosen option subject at school (see Appendix B1.2). School structures were the most common reasons given for not getting into a subject (Fig. 4.19).

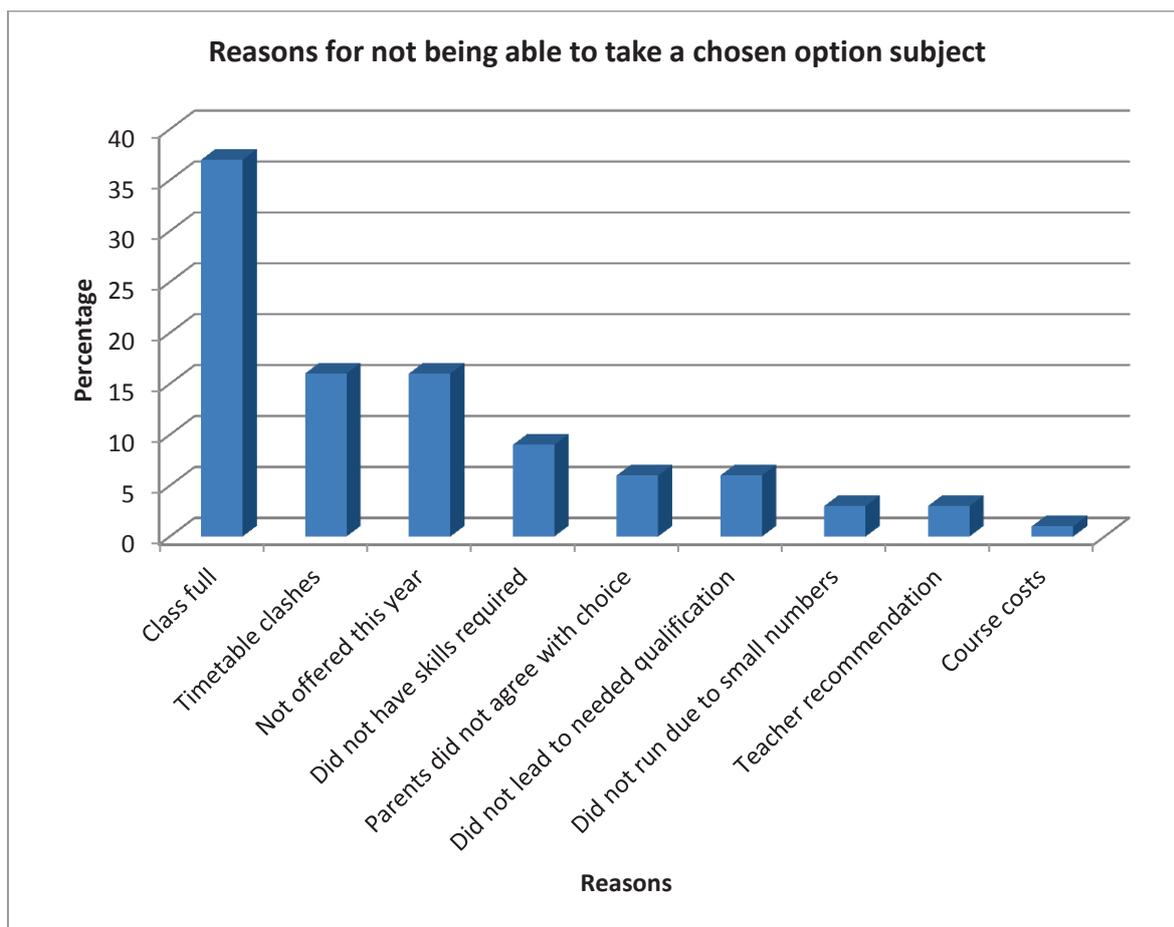


Figure 4.19: Reasons for not being able to take a chosen option subject as reported by students

For some students, their decision making process was further complicated by not “getting into” a subject they had initially chosen, requiring them to undertake a second or even third round of decision making. “I chose ... but that was full ... so I had to choose something else. So I chose ... but again that clashed with ... so then I had to change it to So like, not getting what I wanted twice” (Y9G7). Whether due to restricted entry requirements not being met or late decision making limiting what “was left” to choose from or due to school structural factors such as “classes full” or “timetable clashes”, the final outcome was a reduced choice. These students reported feeling “disappointed” and that it did not “feel fair to them”.

School organisational structures were the most common reasons staff gave for students not getting into an option class (Fig. 4.20). While timetable was seen as the least important factor to consider in class placement by staff, it was seen as the second most common

reason for a student not getting into an option class, with the class being full the most common reason.

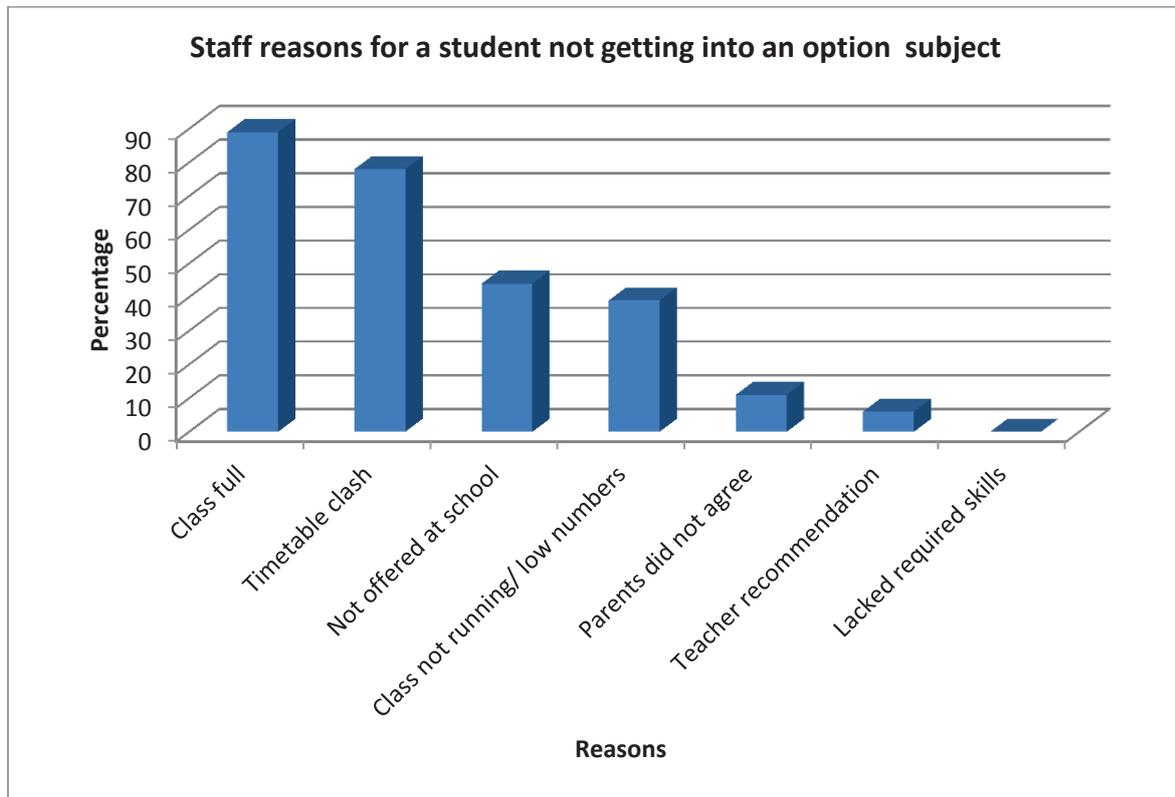


Figure 4.20: Staff reporting of reasons for a student not getting into an option subject

Student request was seen by staff as the most important factor to consider when placing students into option classes (Fig. 4.21). Parent request and academic record were also seen as equally important.

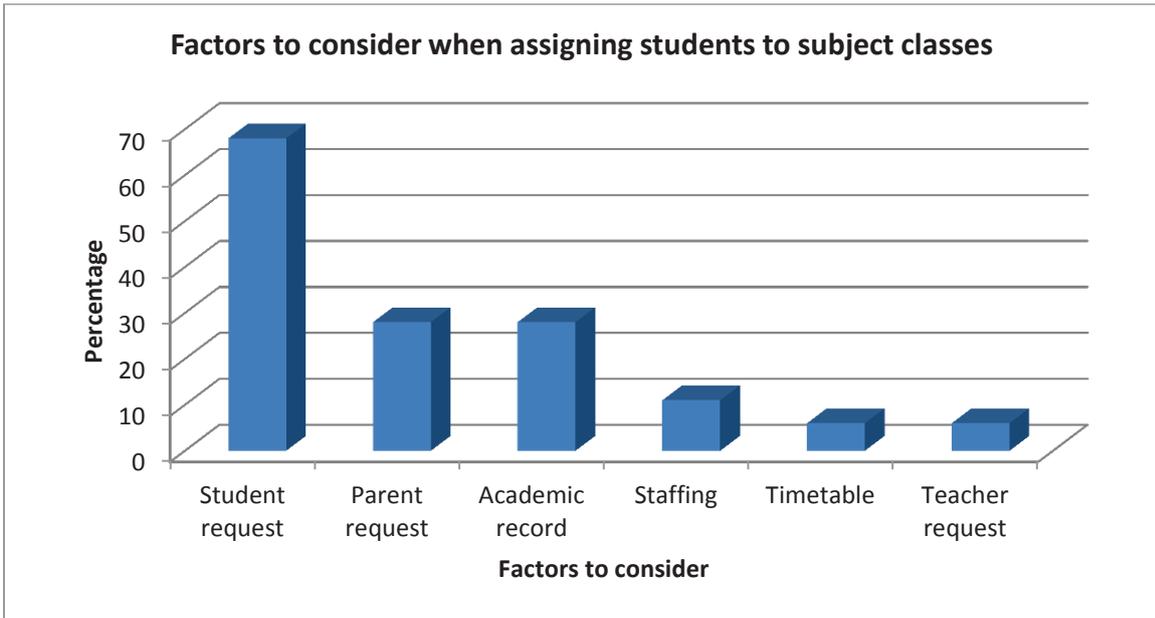


Figure 4.21: Important factors to staff consider when allocating students to option classes

School structures, then, do impact on student subject choices.

STUDENT SUGGESTIONS FOR ASSISTING SUBJECT CHOICE

Students were keen to suggest ideas for assisting them to make subject choices. Both school structures and what information was provided were deemed as important (Fig. 4.22).

Structurally, more subject choices and opportunities for work related experiences were seen as the most helpful.

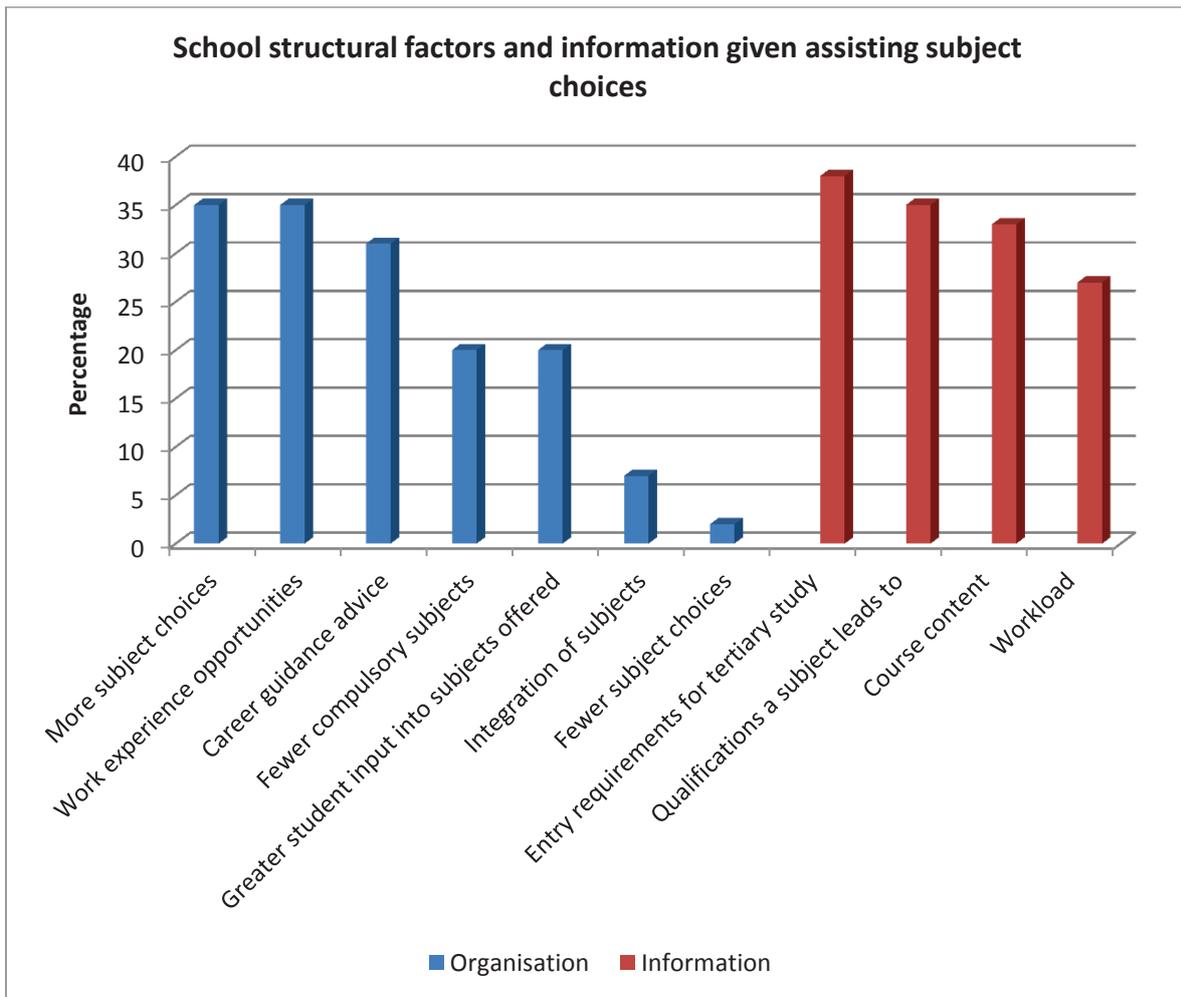


Figure 4.22: School structural factors and information to assist student subject choice

Having enough information to help make decisions was important for all groups.

Information on entry requirements for tertiary courses and the future pathway a subject leads to were seen as very important. All students wanted to know more about what they would be doing in the subject and where it could lead them. “Have like, an orientation day. One day where you go to another subject for an hour” (Y10B8). One student suggested that there should be a “bigger range [of subjects] in primary schools. If you try it all out in primary then you could have worked down the list by the time you get to senior” (Y10G4). An opportunity for students to see whether their learning style would fit the class was also deemed useful. “I’m quite an interactive learner. I think it would be good to get an insight ... even be part of that class for a day... just to see how it works” (Y9B1).

When interview students were asked if they knew who the careers teacher was in the school most (96.6%) did not (see Appendix C2). While students agreed that “it would be

good to have someone to talk to” (Y10G1), their choice of who this would be differed. However, students did have definite ideas of the type of person this should be; “approachable”, “someone who could they could “relate to”, someone who “knew what they were doing. They weren’t just saying something from opinion, but they had facts or reasoning behind it” (Y9B2). Students suggested that if they wanted to talk to someone about careers, then they would talk to family, friends or the school counsellors.

Students also identified a need for interactions with people outside the school environment. “There’s a lot of things that school can give, but there are other things the school can’t give” (Y9B1). They saw visits to workplaces as valuable experiences. “She took me to his work ... he basically gave me a tour and showed me, like, what goes on there. I thought that was super cool so that’s what I want to do” (Y9G7). Another suggestion was to “have a careers day [at school]. For each stand they have a couple of people who’ve just come out of university to talk to you about it” (Y10 G1).

Interviewed students displayed differing views concerning suggestions for school organisation and curriculum structures. More specialised course structures were suggested by some, such as “a few like dead straight ahead options. A straight up photography course” (Y9B2) rather than a more general media studies course. Others, however, saw value in a more integrated approach, where general skills could be taught across a variety of subjects. “Like English, I reckon you could split up into all the other classes” (Y9G8).

Students also wanted more information on workload in subjects, noting that some subjects were seen as more relaxing and some subjects more stressful. “They need a stressometer, like, for each subject” (Y10G6). This was seen as particularly important to assist them to planning their future studies to avoid them choosing “a whole lot of subjects that you won’t be able to handle” (Y8G4).

Both parents/caregivers and staff saw work experience opportunities as being very helpful to assist students to make subject choice decisions (Table 4.23). The value of students having greater input into what subjects are offered by the school is an area of disagreement between the two adult groups, with staff seeing this as more valuable than parent/caregiver respondents did. While staff saw integration of subjects as valuable, parents/caregivers were less convinced that this was so (Table 4.23). The depth of understanding of

parents/caregivers as to what this term meant was not gauged by this study and needs to be considered in relation to this data.

Table 4.23: School organisation helpful to assist subject-choice decisions as reported by parents/caregivers and staff

School organisation	Very helpful/ helpful %		Neither helpful / not helpful %		Don't know %	
	Parent/caregiver	Staff	Parent/caregiver	Staff	Parent/caregiver	Staff
More subject choices	67	35	24	65	10	0
Fewer subject choices	5	17	86	78	10	0
Fewer compulsory subjects	5	28	85	72	10	0
Integration of subjects	24	33	57	61	19	6
Work experience opportunities	86	89	14	11	0	0
Greater student input into subjects offered	33	72	57	28	10	0

STUDENT VOICE

Interviewed students were asked to talk about their perception of the role of student voice in relation to subject offerings and choices in the school. The consensus was “varying degrees” (see Appendices C2.3, C2.4 and C2.5). Responses varied, reflecting the students’ different personal experiences. In general, students felt they were given some level of say within boundaries set by the teacher and which changed depending on the task at hand. They commented on what they saw as a benefit of an overall curriculum, which may prevent them from making a poor choice. “It’s sometimes good to stick to that and not always having a choice in what you’re doing and trying to avoid it” (Y8G6). While some students felt that their teachers were the best ones to determine the pace of learning, others reflected that “if you just do what the teacher wants you to do all the time it can sometimes be a little

bit annoying” (Y8G6). A Year 8 student summarised their group’s view; “more would be welcome” (Y8B2).

SUMMARY

The study findings provided useful insights into middle school students’ experiences and perceptions of making subject choice decisions. The recurrent themes in the data serve to highlight key influences on the students’ decision making and identify aspects which can impact on choices. While quantitative data provided an overall description of the process, student voice, captured in the focus group interviews, was able to provide a more detailed insight into the experience.

Students’ processes for decision making, while varied, all involved elimination of options. How criteria for elimination were determined was found to be complex and dynamic. Enjoyment and interests were found to be the most important influences on subject choices. The strong relationship found in the study between enjoyment and perceived ability places importance on the consideration of how middle school students gain these perceptions. Both individual and external influences were found to have an impact.

Students readily ranked subjects according to their perceived status. These perceptions were based on their past experiences, opinions of others or assumptions about the subject’s usefulness for the future. There were indications in the findings that there may be different cultural approaches to determining the status of a subject.

The relative lack of research found to be undertaken by the students when making subject choices, particularly those transitioning from middle school to senior school, raises a concern as to how informed a decision they are making. The study found students had limited knowledge and understanding of future learning pathways and qualification systems and gave little or no attention to developing a study plan against which subject choices were considered. Given the stand-alone nature of the study’s middle school, this lack of awareness of the importance of having a carefully thought out study plan in order to keep future options open is concerning, particularly for the Year 10 students.

School structural factors such as timetables, curriculum offer, option lines and full classes were found to impact on student subject choices. Such factors had a greater impact on late arriving students and those who had made a change to initial choices. This highlights the

importance of students making informed decisions to avoid having to make a later choice from a more limited range of options.

Parents were found to be both the most important influence on subject choices and the most common source of information. However, the study identified a gap between parents' understanding and knowledge of their children's future plans and the skills and qualifications they would need to get there. This is even more problematic for ESOL parents, who relied on their children to mediate the information to them.

While peers were not identified by students as important influences on subject choices, closer inspection of where students got information that informed perceptions and choices and what they considered when actually making choices, revealed that peers did have a role; particularly students in classes above them.

More information on course content, workload, and qualification and career pathways were identified as being useful to help make subject choices. The school was found to be an important source of information for both students and parents with the School Option Information Evening seen as the most useful source for both groups. However, students were critical of the information they received there suggesting that they were given a biased view of courses offered. These findings highlight the important role the school plays in informing and communicating clearly to students and parents the options available and the implications choices may have.

Students in the survey did not directly identify teachers as important influences on subject choices. However, what teachers did in the classroom was seen as significant, with direct links made to students' attitudes to subjects and perceived ability in them. Furthermore, students suggested that they would seek advice about subject choices from a teacher who they had developed a bond with; one who knew them and their needs.

Some significant relationships were identified in the findings for year level and gender. Future planning and career choices were seen as increasingly important to students as they progressed through the school. However, alongside this was a decreasing level of confidence in students to make subject choice decisions. Furthermore, girls reported having less information and less confidence to make these decisions than boys.

Students were able to make useful suggestions as to how the school may improve their experience of making subject choices. They wanted greater links made between course learning and their world, both through what they saw as a more relevant curriculum and through opportunities to experience the world of work first hand. Students wanted to have an experience of what that learning would look like before having to make choices. More information on workload and senior and tertiary study options and requirements were suggested as ways to assist them to consider subject choices in terms of longer term study plans. While government and school documents encourage a responsive curriculum, relevant to the students world and able to prepare them for their futures beyond school, the study found that resourcing at the school level placed limitations on curriculum provision which impacted on the choices available to students.

The need for early provision of information on subject choices, learning pathways and careers was a recurrent theme in interview responses. Students acknowledged their changing world views and saw value in having opportunities to explore and develop new skills and understandings throughout their time in the middle school.

These findings provided valuable information on how students experienced and perceived subject choice decision making. Discussion of the extent to which these findings agreed with those in established research and new information which was revealed in the study is discussed in the following chapter.

Chapter 5: DISCUSSION

This chapter discusses the findings in relation to the academic literature critiqued in Chapter 2. Students' perceptions and experiences of decision making in the middle school environment are examined along with influencing factors on the decision making process. The school's response to and support for subject-choice decision making is examined to provide an overview of the environment within which decisions are being made. What information and support students suggest as being useful to assist them to make subject choices is then considered.

Being able to choose subjects to study at school was seen as an important part of the middle school experience for students at the school (see Appendix C). Being able to make choices of subject at school was seen as an important part of the middle school experience for students in the study (see Appendix C). It was also shown that matching student interests and abilities to the appropriate levels of learning challenge and perceptions of relevance was critical to the continued engagement and success of students (Blenkinsop, McCrone, Wade & Morris, 2006; Gibbs & Poskitt, 2010; Wylie, Hodgen, Hipkins & Vaughan, 2008).

The view that early subject choices are not as important as those made in senior school years, expressed by some in the study and reflected in the lack of research into early subject choice making, is one that this study challenges. In addition, the study findings confirm that subject choices for students in a stand-alone middle school environment have their own particular issues.

The identification of many and diverse influences impacting on subject choice decisions in the study confirmed that the process is a complex one as had been found in previous studies (Blenkinsop et al., 2006; Hipkins, Vaughan, Beals, Feral & Gardiner, 2005; Loch, 2009; Marson-Smith, Golden & McCrone, 2009). Students need to be able to assess whether they have sufficient, accurate information to make current subject choices and to ensure these decisions will be satisfactory in the long term (Caskey & Anfara, 2007). While a student's motivation directs formation of choice criteria, previous research points out that the criteria for elimination may not always be able to be determined by the individual (Bandura, 2006; Caskey & Anfara, 2007; MOE, 2005-2007; Schultheiss, Palma & Manzi, 2005). Furthermore, students at both ends of the achievement scale can be negatively impacted by poor subject

choice decisions (Blenkinsop et al., 2006; Wylie et al., 2008). An interesting point was raised by a student in the study who was late entering the school. He found the process overwhelming due to the haste in which the subject choice decision had to be made and the restricted choice available due to classes already being full (see Appendix C2.5). Given that many transient students are at risk of low achievement, a hasty and not well thought out option subject class placement may increase the risk of failure (Durling & Bishop, 2010; Jensen, Madjar & McKinley, 2010; Madjar, McKinley, Jensen, & Van Der Merwe, 2009). This is an important factor to consider when assigning late enrolling students to option classes. The study confirmed research literature in finding that both individual student and structural factors played a part in establishing elimination criteria (Marson-Smith et al., 2009).

INDIVIDUAL FACTORS

Decision making approaches employed by students were varied but reiterated those in the literature; using planning, researching and eliminating (see Appendix C). The study findings agreed with research showing that many internal and external factors, such as perceived ability, past experience, family and peers have an influence on students' attitudes to subjects (Adey & Biddulph, 2001; Bandura, 2006; Vaughan, 2003; Wylie et al., 2008).

A developing sense of who they were, including a growing awareness of strengths and weaknesses, was evident in students identifying enjoyment as a prime motivator to change a subject. The study identified a strong link between a middle school students' level of enjoyment of a subject and their perceived ability in the subject; with greater enjoyment occurring in subjects a student felt they were good at (Fig 4.5). This relationship carried across all year levels, gender and ethnicity groups. Furthermore, this relationship was found to influence subject choices, with students more likely to choose subjects they enjoy and are good at. This finding reflected studies at senior year levels (Blenkinsop et al, 2006; Madjar et al., 2009; McCrone, Morris & Walker, 2005; Pajares, 1996).

Past experience of success or failure and uninformed ideas of the skills, understandings and knowledge seen as necessary to achieve future success in a subject or future field of endeavour were both found in students' references to their abilities (see Appendix C). Perceptions of both of these factors are susceptible to external influences (Bong, 2004; Jensen et al., 2010; Lord, 2003; Madjar et al., 2009; McCrone et al., 2005). Furthermore,

sources of information used by students to make subject choices may not be providing them with up-to-date, unbiased information (Jensen et al., 2010; Turner & Lapan, 2002).

The focus on achieving academic success appeared to become increasingly important to students as they moved up the school, with exam success equated with success in future studies and occupations (see Appendix C). At the same time, there was a decrease in self-concept with students feeling less positive about their subjects and their abilities.

Longitudinal studies have found that students' perceptions fluctuate over time in response to many factors e.g. teacher-student relationships or increasing difficulty of the content (Blenkinsop et al., 2006; Gibbs & Poskitt, 2010, Hipkins et al., 2005). A closer examination on how students determined these elimination criteria revealed interesting information.

Students in the study reported that it was important to know their strengths and weaknesses (see Appendix C). In making subject choices, students can be faced with making a choice between taking on the challenge of new learning which requires sustained effort and resilience or choosing a safe path which would ensure the maintenance or improvement of their current level of success. Dweck (1999) suggests that if a student adopts an intrinsic approach, focusing on individual progress towards achieving a relevant and defined learning goal, then taking on and succeeding in the challenge of a subject you are not good at can be seen as exhilarating, motivating and satisfying, even when excellence may not be achieved. If an extrinsic approach is adopted, with success measured against external goals, for example getting top marks in a subject, then a risk avoidance pathway may be preferred (Dweck, 1999; Vaughan, Roberts, & Gardiner, 2006; Wylie et al., 2008). A student mind set then, impacts on their elimination of choices.

If, as the study shows, the prime concern in choosing a subject is enjoyment and interest, on what basis are students choosing subjects with which they have little or no experience, for example the opportunity to learn a new language? Students suggested that while a taster approach was useful it also had the drawback of not having enough exposure to the subject to become proficient in it, particularly 'new' subjects such as languages and subjects requiring the development of specific skills through practise (see Appendix C).

Consequently, students ran the risk of rejecting an opportunity to further develop skills in an area, in favour of continuing with a subject in which they felt assured of achieving success. Such an approach responds to the middle school student need for exploration of options

(Bandura, 2006; Dickhäuser, Reuter, & Hilling, 2005; Madjar et al., 2009; Vaughan, 2008). However, subject choices made with a short term focus, based on current strengths and the guarantee of academic success, may rule out pathways in the future (Blenkinsop et al., 2006; Dweck, 1999; Vaughan et al., 2006). A further temptation was for students to choose a perceived 'easy option' to avoid failure or hard work and effort. A reason to choose a subject then may be being made by eliminating what not to choose. These findings highlight the importance of students having an awareness of their potential and possible future directions when considering subject choices.

Students acknowledged a need to keep options open (see Appendix C) supporting research literature that warns students to be mindful not to close doors to new experiences (Dickhäuser et al., , 2005). However, taking on a new challenge in learning requires students to take risks (Gibbs & Poskitt, 2010). Choosing a subject they might not like, which they may find challenging and which they may not achieve highly in at the early stages may not be attractive to students with a focus on short term academic achievement or a narrow learning pathway. How willing were the students to take these risks and what potential benefits did they perceive they would gain in doing so? Investigation into what encouraged students to persist in subjects they found difficult or take up new learning challenges provided some insights.

Students reported different motivations for deciding on whether to continue with a subject, especially one in which they were not achieving highly (see Appendix C). On the one hand students admitted reluctance to choose a subject for future NCEA study that they had a only a short experience of and consequently did not deem themselves 'good at'. On the other hand they also saw the benefit of continuing to develop skills which could assist them in the future. If past experiences are the benchmarks for students to determine ability levels in a subject, which in turn affects their enjoyment of a subject and influences their decision making, how are students making decisions on new subjects and how much danger is there of one negative past experience determining a whole future? These findings raise some interesting considerations for subject leaders designing the 'taster courses'. The balance between offering a 'fun' focused course which will provide students with sufficient skill proficiency and confidence to continue with a subject in the senior years within a limited time period is therefore a challenge for schools (Jensen et al., 2010, Wylie et al., 2008).

Decision making

The study found a direct link between students' confidence to make subject decisions and the level of information they had to assist them; with higher levels of information resulting in greater confidence. This is in line with research in the senior years (Madjar et al., 2009; Vaughan et al., 2006). However, students in the study reported that they had undertaken limited or no research on future learning pathways; rather they appeared to be waiting for the information to be given to them (see Appendix C). This is particularly concerning for Year 10 students in a stand-alone middle school environment who also face a change of school. Furthermore, girls in the study reported having less information and feeling less confident than boys to make subject choice decisions, indicating that consideration is needed as to how best to provide information to the different groups. The low importance given to future planning and the lack of knowledge of the NCEA qualification system identified in the student, parent/caregiver and staff surveys, despite this information being readily available is concerning. Knowledgeable and reliable information which takes into account the dispositions, stage of development, and needs of the decision maker is regarded as crucial to successful subject choice decisions (McCrone et al., 2005; Wylie, Hodgen & Ferral, 2006).

Closer examination of the information given to students to assist the subject choice process provided further insights. Commonly, students reported wanting to know more about course content, what they would actually do in the course and how much homework they would get. However, importantly, students also indicated that they did not want information 'sugar coated'. Students are drawing attention to an issue identified in the research; while access to information is one aspect in decision making, determining what information is valid and reliable is another (Blenkinsop et al., 2006; Vaughan, 2003). This can be a difficult task for our middle school students to do alone, especially for a student who has little or no idea of what direction they want to move in (Benkinsop et al., 2006).

The range of strategies employed by students in their subject choice decision making and the diverse influences which impact on them found in the study suggests that subject choice decision making is a complex process. Yet, while information was given to students on what choices were available and how they needed to proceed to submit their choices to the school, little guidance was given to students on how to go about making the decision

(Motuschool, 2015). Without support, students were left to untangle the often confusing consideration of information they had gleaned from a variety of sources. Learning pathway decisions require informed and timely support, particularly within a middle school situation (McCrone et al., 2005; Pendergast & Bahr, 2010; Ward, 2000; Wylie & Hodgen, 2008). Wider surveys have found evidence to suggest that such support is not happening for Years 7-10 students (ERO, 2015).

Future planning and careers

Despite future planning and career direction seen as increasingly important to students in the higher year levels, there was little evidence found to suggest that students were giving attention to the planning of a learning pathway or indeed being encouraged to do so (see Appendix C). While identifying a future goal is important this is not enough and planning at an early stage is beneficial (Marson-Smith et al., 2009).

Students indicated intentions for schooling beyond Year 10 and had some awareness of the need to gain NCEA credits, however, they were unfamiliar with what this next stage of their learning journey would entail (see Appendix C). There appeared to be little or no awareness of the possibility that current choices could present possible barriers to future pathways, a danger identified in the literature review (Dickhäuser et al., 2005; Foskett & Helmsley-Brown, 2001; Jensen et al., 2010; Madjar et al., 2009). This links to students' perceptions of a lack of connection between current learning and future learning pathways found in the study.

The move towards studies for qualifications appeared to be a turning point for students, with approaching NCEA studies increasingly referred to by students in the higher year levels, and NCEA studies reported as a strong motivator to "start to work hard [next year]" (Y10G1). However, perceptions of what this study would consist of were based largely on second hand information from older students or parents. Both of these sources have been shown as having less than accurate knowledge (Blenkinsop et al., 2006; Loch, 2009).

Striving to achieve a future goal was reported by students as an increasingly important motivation to take on the challenge of new and 'difficult' learning or to choose a subject which would broaden their abilities and enhance their prospects for the future, with older students taking on a more strategic approach and paying greater attention to their future

direction (see Appendix C). While the adolescent focus on the present moment must be acknowledged, it is critical that appropriate goals are set when making future study plans. The study provided a stark example of this, in a student who had exclusively researched a defined career goal to determine a study plan (see Appendix C2.5). Their conclusion was that high academic achievement was unnecessary and so felt there was no need to strive for excellence in future studies. Encouraged to undertake a more diverse investigation, this student may have set a more challenging goal providing wider opportunities for the future. Given that students' goals and dreams change over time, continuing review and development of learning pathways to respond to changing goals and broadening opportunities, particularly at strategic decision making times such as making subject choices, is important (Bandura, 2006; ERO, 2012; Vaughan et al., 2006).

Year 10 students spoke of being made to increasingly consider their future, referring to the "reality of the world" as relentlessly creeping up on them (see Appendix C). Younger students, however, pointed out that it was unwise to base subject choices on career directions, admitting that they felt they lacked enough self-knowledge and awareness of what was out there to make informed decisions. These findings are consistent with research that shows adolescents making an increasing connection between subject choice decision making and future career pathways (Johnson, 2000). The idea of possible selves was evident in student discussions on subject choices, whether in the form of a traditional career role such as police officer, nurse, doctor or a more generalised view of an "IT guy" or "something to do with sports or the arts". These possible selves appeared to be formulated through family based experiences, the media or more general discussions within the family (see Appendix C). However, students were able to provide little or no information of what their possible job might entail or what skills, qualifications or experience they would need to get there. These findings agreed with published research showing that adolescents' perceptions of their future possible self is formed through interactions within the world they live (Loch, 2009; Markus & Nurius, 1986). Thus, each individual has a unique set of influences which contribute to their perception

While school policy encouraged inclusion of careers education across the curriculum, students reported varied experiences of this across classes. Awareness and use of careers websites also varied. While generalised programs targeted at specific year levels and

information websites can be useful this is only part of the decision making process. Researchers such as Howieson and Semple (2013) question whether it is enough to restrict students' dreams to tick boxes indicating interests and perceived abilities and subject to the adolescents' changing attitudes and concepts of identity. Furthermore, individual student factors, such as cultural capital and school structural factors, such as curriculum and resourcing, which do not appear in the tick boxes also have an impact on the choices available to students (Marson-Smith et al., 2009).

While actual experience of a workplace was seen as useful for future planning by students, parents/caregivers and staff in the study, students reported few opportunities for this other than at Year 10. While exposure to a variety of occupations increased a students' awareness of possibilities, how useful was this in assisting students to make subject choices? Given the influences at play in such decision making and the diverse experience of students, the current study suggests that on its own it may have had limited value. Furthermore, the fluctuating and individualised nature of adolescent development raises the question as to whether such experience at only one stage of schooling is sufficient. This study would suggest that not only is Year 10 too late for some, but also suggests that all middle school year levels would benefit from opportunities to expand their perceptions of their future and review pathways. A more useful approach suggested by Johnson (2000) would be discussion and connection of the skills and knowledge required to be successful in their chosen field to current learning to determine a learning pathway that would best assist them to get there. Providing advice, guidance and experiences to adolescents to assist them in their explorations then, is not a simple task. To make this advice beneficial, the advisor must also have knowledge of a student's interests, abilities, needs and dreams (Gibbs & Poskitt, 2010; Prosser, McCallum, Milroy, Comer, & Nixon, 2008). Such a role requires teachers to not only be knowledgeable about learning pathways but also to keep up to date with current education initiatives and employment trends (Blenkinsop et al., 2006; Marson-Smith et al., 2009; Schultheiss, Palma, & Manzi, 2005). This raises some unique issues for the stand-alone middle school, due to the separation from senior classes and teachers involved in senior learning pathways. How this may contribute to the types of advice and direction given to middle school students in relation to making subject choices would be an interesting question for stand-alone middle schools to reflect on.

KEY INFORMANTS

The study findings highlight the importance of students having access to accurate information to ensure they are making subject choices which will allow them to reach their potential. Having informants who are knowledgeable is crucial. The research literature suggests that, if left unguided, students tend to limit their information searches to those ideas and information sources that are familiar and easily accessible to them (Blenkinsop et al., 2006). This was affirmed by the current study, in which the students relied on their family, peers and teachers.

While students in the study were adamant that they were the ones making the final decisions on subject choices, most acknowledged and accepted that parents had or would have an influence on their decision either directly or indirectly. This is confirmed in the research literature (Loch, 2009; McCrone et al., 2005; Turner & Lapan, 2002). Students saw their parents as experts; they had completed their education and had experienced the world of work. Whether through the values they promote or through direct channelling of a child towards particular fields, parents impact on the direction their child will go (Vaughan et al., 2008). If the information is accurate and reliable it can encourage valuable review, however where the advice is not well informed or is biased, this could have a negative effect on the satisfaction with a learning pathway and a student's long term well-being (Madjar et al., 2009; Turner & Lapan, 2002). How expert parents are is variable, with parents/caregivers in wider surveys admitting that they need assistance to ensure they are providing informed advice (ERO, 2015).

The adolescents' perception of the world of work is informed by family and family network experiences (Loch, 2009; Primé, Nota, Ferrari, Schultheiss, Soresi, & Tracey, 2010; Turner & Lapan, 2002). The isolated position of ESOL students identified in the study is particularly difficult as they are able to provide limited experiences and opportunities due smaller networks (see Appendix C2.5). This is relevant also to low economic and new immigrant families (Loch, 2009). Limited cultural capital and difficulty in accessing and understanding general information may explain ESOL students' greater use of websites for information gathering found in the study. By taking a lead role in providing timely and accurate information to their students and families, the school may be able to mitigate the impact

that a lack of cultural capital may have on these students' futures (Bandura, 2006; Gibbs & Poskitt, 2010; Hipkins et al., 2005; Madjar et al., 2009).

Family members were found to play an important role in developing students' perceptions of a subject's status and usefulness (see Appendix C). Inaccurate information, provided by family members, as to a subject's value for the future may incorrectly direct students towards or away from a subject.

While family influence is shown to be important in all areas of the study how well prepared they are for informing students about subject choices and career directions varies (see Appendix C1.2). How families can best be supported and resourced to provide advice is an important consideration for schools, communities and policy makers.

Students did not indicate friends as an important influence on their subject choices, however, a closer look at their decision making strategies suggested otherwise (see Appendix C). While students advised others not to choose a subject because their friends were doing it, many indicated that friends had been an important consideration when making their own choices. Students also reported liking subjects more when they were in classes with their friends. Older students and older siblings were regarded as experts on subject information. Indeed, the Year 10 students in the study appeared to rely primarily on this source for information on what was offered at their next school. Thus, others' past experiences, individual learning needs and styles were also found to be influencing subject choice decisions. While these older students were able to provide observations of their experiences, these observations may not have equated with those they were advising and which the receivers were unlikely to have been made aware of (Foskett & Helmsley-Brown, 2001; Porfeli & Lee, 2012). Relying on an older sibling to gather information and formulate future plans assumed that they had the necessary knowledge and access to information to make appropriate decisions, whereas the study found that this was not necessarily the case (Y9G7).

The role of teachers in the subject choice process is a complex one and one which was seen differently by the different groups in the study. Students, while not reporting teachers as an important influence, recognised that what teachers did was important (see Appendix C). Who taught the class had an impact on student perceptions; with most admitting that they enjoyed subjects more in a class with a teacher they liked. This was confirmed in the

students' different experiences of learning the same subject in different classroom environments. A teacher who recognised their learning needs and was approachable when learning faltered was seen by students as key to creating positive classroom interactions, aspects identified in previous research (urling & bishop, 2010; Gibbs & Poskitt, 2010; Hattie, 2009). Specialist subject teachers were singled out as passionate and knowledgeable about their subject and consequently were able to enthuse students about the learning. Students also reported that having a class environment that suited their personal learning style was important, with some preferring a social, group oriented approach and others an individual, independent one. Past experiences of a subject are shown to be a determinant of students' liking or perceiving themselves as good at a subject (Ireson & Hallam, 2001; Jensen et al., 2010; Madjar et al., 2009; McCrone et al., 2005).

Teachers' acknowledgment in the study of having incomplete knowledge of NCEA and tertiary pathways, and lack of confidence to give informed advice to their students reported by teachers in the study is a concern (Fig 4.15). This is particularly so when specific roles in the school, such as Whānau teachers and Heads of Learning Area (HOLA's) are suggested in the school documents as information sources for students and parents (Motuschool, 2015). We are reminded in research that while an empathetic teacher is beneficial, an informed study plan is also essential for students to succeed and reach their full potential (Prosser et al. 2008). However, in order to be able to assist students to develop study plans, teachers must have knowledge both of student needs and of possible learning pathways (Gibbs & Poskitt, 2010; Vaughan et al., 2006; Wylie et al., 2008). Appropriate professional development to address this shortcoming is an urgent consideration if the students' needs in this area are to be met.

A further concern raised in the study was that students were unsure as to who in the school held the role of Careers Teacher, indicating a lack of profile for careers education. Students were keen to provide a profile of the qualities a careers advisor would need to undertake the role; emphasising someone who knew them well and who had the expertise and resources to give them accurate advice. Along with being approachable and trusted, a staff member who they had a close contact with (e.g. Whānau teacher) or who they held in high regard in their subject area (HOLA or subject specialist) were put forward as the most preferable candidates.

STRUCTURAL FACTORS

While school option evenings were a primary source of information for students and parents/caregivers, students' views on the usefulness of school option evenings in providing an unbiased overview of a subject were revealing. Students reported that they felt they were being given a positive slant and surface view of what a particular subject or course was about. Considering students' desire for clear and unbiased information on which to base subject choices, examination of how subject offerings are presented for students would be valuable.

In recognition of the link between subject choices and future pathways, the school provided opportunities for Year 10 students to meet face to face with workers from various industries in the school based Careers Day. Year 10 students were also able to attend the externally provided Careers Expo. Students identified these events as motivations to discuss with parents their future study plans in relation to possible career choices. Such informal discussion about subject choices and careers occurring between parents and students have been found to play an important role in decision making (McCrone et al., 2005; Wylie et al., 2008). However, restricting this opportunity to Year 10 students fails to address the importance this information holds for younger students making subject choices.

While the internet has a wealth of websites providing information on careers, such sites appeared to be seldom used by the students. Furthermore, while such sites may identify a future occupation and give guidance as to climbing the steps to get there, such an approach is reliant on the reliable reporting by the adolescent on their abilities and interests. This study would suggest that this reporting may be neither accurate nor independent of outside influences. Indeed, it is likely to reflect an appraisal based on current perceptions influenced by the individual's stage of development, personal circumstances and experiences at that particular moment in time. Using information gained through this method in isolation to determine a learning pathway and future direction may not be a wise approach.

Furthermore, in order to effectively reflect on the information they receive, the students need to have ideas about potential jobs, with those not sure having a more difficult time seeking and receiving information. While the influence of social media was not highlighted in the study findings, given the rising use of social media by adolescents, the potential

usefulness of social media, such as blogs sites, to help inform students would be worthwhile to investigate.

Students' reporting of their experiences of the subject choice process provided insights into the impact of school structures on subject choice decisions. The subject choice process itself was not simple; just consider the number and range of subjects from which students had to choose: six courses from the twenty-seven offered offered for Year 9 students and three from twenty-three offered at Year 10 (Motuschool, 2015). Furthermore, the process was undertaken within a restricted timeframe. While accepting of the subject choice process, not all students viewed it as fair, with restriction of access to courses through high selection criteria and a perceived lack of addressing the needs of later arriving students given as examples. Student numbers impacted on subject choices, both through classes being too full or with too few students for them to run. Despite calls for student choices not to be dictated by resourcing, research shows that it does happen (Blenkinsop et al., 2006; McCrone et al., 2005; Turner & Lapan, 2002; Weeden, 2006). The resulting loss of opportunity to explore an area of interest or develop a set of skills could have long-term impacts. Furthermore, having the final outcomes of the process constrained by resource allocations over which the students and the school have little or no control is unsatisfactory (Blenkinsop et al., 2006; Dickhäuser et al., 2005; Wylie, 2013). These findings bring into question just how much real choice students are given when making subject choices.

Prosser and colleagues (2008) propose that rather than taking the view that our adolescent students are not working at school, it may be more beneficial to view school as not working for them. They suggest that reforms of structures and curriculum are required to make schools fit students' needs better and sustain change.

The New Zealand Curriculum (2007) encourages utilisation of the natural connections that exist between learning areas and that link learning areas to key competencies. Students saw core subjects as providing essential literacy and numeracy skills. However, students also saw that literacy and numeracy were also learnt in optional subjects. Given that students enjoy, and perform better in subjects they choose for themselves, making subjects compulsory may be counterproductive to improving knowledge in a specific learning area (Blenkinsop et al., 2006; Gibbs & Poskitt, 2010; Schultheiss et al., 2005). Indeed, all groups in the study did not see compulsory requirements as a useful move. Encouraging students' interest in

learning by making subjects relevant may have more impact in determining a student's future study and career choices. Greater integration of subjects, with a focus on disciplines of learning, could provide opportunities for reorganisation of curriculum provision which would allow for students' involvement in broader learning experiences (Robinson & Aronica, 2015; Beane, 1995).

Keeping future options open by choosing a range of subjects was common advice from students to their peers for subject choices (see Appendix C). Providing broad choice within resource limitations is an on-going issue for schools (Blenkinsop et al., 2006). The school timetable structure endeavours to cater for student needs through starting with student choices from a range of high interest 'specialised' subjects (Motuschool, 2015). However, as previous research shows, with discretely taught subjects there was a school need to cluster options into workable lines while trying to avoid as many subject choice clashes as possible (Ferrtti, 2007; Rettig, 2013; Vaughan, 2008). Furthermore, the use of semester timetabling, while allowing for more opportunities for choice, provide limited time for students to develop skill and competence, which can influence their perceptions of abilities. Such structures can lead to an early narrowing of learning pathways (Madjar et al., 2009). The practice of organising curriculum into option lines has been found to support traditional learning and career pathways (Hipkins et al., 2005 ; Vaughan, 2008). Furthermore, it could leave them ill equipped to alter plans in response to changes of direction and new imagined futures and in danger of an unintended, early specialised career pathway (Jensen et al., 2010; Markus & Nurius, 1986). These findings suggest that the concerns raised in research around senior secondary programmes offering alternative courses are also relevant to middle school course offerings (Jensen et al., 2010; Madjar et al., 2009).

If such structures are continued, a review of how these can better reflect a balanced learning pathway providing for a broad range of future options would be valuable. Greater consultation and communication between the middle and senior schools is critical to ensure students have access to broad, cohesive learning experiences (ERO, 2015).

Where a subject department's resourcing depends on student numbers, departments often promote the fun aspects of courses providing students with a biased view of what they will be doing if they choose the subject, evidenced in the study students' descriptions of option evening promotions. As students indicated, this can lead to later disillusionment with

subject choices or failure of students to achieve (see Appendix C). These findings confirm research showing that curriculum and program provision are impacted on by the limitation of resources (McCrone et al., 2005; Turner & Lapan, 2002; Weeden, 2006).

The need to make subject choices, with the progression from Year 8 to Year 9, Year 9 to Year 10 and Year 10 to the senior years mark critical transition points for students. The appropriate timing of support and information delivery for decision making led to some debate in the student interview groups, with some feeling that the middle school years were too early for students to have to consider future learning and career pathways, in particular NCEA. However, research shows that timely planning for transition is important (Pendergast & Bahr, 2010; Ward, 2000; Wylie et al., 2008). Furthermore, with students likely to change their minds as they gain more experience of subjects and options beyond Year 10, it is important that they think about and be exposed to experiences of and discussion around future pathways and careers.

An additional consideration for students at the study site was the choosing of a new school for Years 11-13, with this being a common focus in the Year 10 students' discussions on future study plans. The stand-alone middle school is presented with the problem of whose information they provide; that concerning the designated senior school or information from all the schools to which their Year 10 students might move. The drop in the confidence of Year 10 students' to make subject choice decisions found in the study could be the result of a perceived lack of connection to a senior school, with the teachers and school systems largely unknown to them. The uncertainty of their next decision making environment may have led them to delay making commitments to learning pathways until they had tried out options at the next school (Ward, 2000).

STUDENT VOICE

Students recognised that early year's experiences had influenced their current perception of abilities and interests (see Appendix C). They were able to provide valuable observations, insights and suggestions to assist the school to understand their needs and provide appropriate support to improve the process for decision making. Students wanted a hands-on approach; to see learning in action rather than view a static display or read a brochure. Being able to experience or sit in on option classes prior to choosing was seen as an opportunity to observe and reflect on the content, classroom atmosphere, and learning

style required. In short, they wanted to see how well the course and its delivery suited them. Seeking and listening to the views of students on subject decision making could be informative for the study school and the senior schools these students will attend.

Furthermore, students felt that early exposure to and experience of different career options would be useful to help them explore possible futures rather than being pressured to make rushed decisions later on. They suggested that activities such as Career Expos should be open to all year levels. Students' experiences of having a voice in how classes were run provided an interesting observation. While such involvement was seen positively, students saw direction from teachers as especially important in encouraging them to take on more challenging tasks and the subjects which they may otherwise avoid.

SUMMARY

This study asserts that making subject choices is complex process and a critical point in a students' educational journey requiring preparation and expert support. Enjoyment and perceived abilities play a central role in student subject choice decisions. It is important to acknowledge and understand that these early subject choices may have far reaching consequences. However, this study has shown that much of the subject-choice decision making of middle school students is haphazard and lacking future planning. The study advocates that alongside provision of choice, students need to be provided with skills to make these decisions and appropriate support to ensure they make satisfactory decisions for both their short and long term well-being.

There is a need for face to face, personalised guidance to assist our middle school students to negotiate the twists and turns of their educational journey and help them to see a wider view of their future. While parents/caregivers were identified as key informants for students on subject choices the role of teachers, peers and the media was also evident. This study recommends a pro-active approach to informing and supporting middle school students in their subject choices. To do this will require a review of resourcing of middle schools and of teacher professional development in this area and increased collaboration with the wider community.

Structuring of middle school programmes should encourage and allow students broad choice which optimises opportunities for successful future learning pathways (MOE, 2007;

Ward, 2000). Furthermore, the study supports research findings that advocate for course content relevant to the middle school students' world and linked with the community (Blenkinsop et al., 2006; Gibbs & Poskitt, 2010; Wylie et al., 2008). A unique challenge for the stand-alone middle school is that it is preparing its students for the senior school years in an environment that is not certain. The following chapter makes some suggestions as to how this challenge may be met.

Chapter 6: CONCLUSION

This chapter draws together the various strands running through the study, synthesising key findings to draw conclusions about how middle school students' experience and perceive educational decision making.

This study set out to answer the question: How do middle school students experience and perceive educational decision making? Student reporting of experiences and understandings provided valuable insights into how they went about making subject choice decisions; the strategies they employed, influences, supports and barriers they encountered along the way and their unique perceptions of the process. While students saw making subject choices an exciting part of their educational journey, examination of how they went about making these choices revealed a complex process, influenced by dynamic individual and structural factors. Students demonstrated a variety of approaches to making decisions; however, each involved elimination of options against a set of individually determined criteria. It was how these criteria were determined which revealed the diverse and complex influences which impacted on their final choices.

The primacy of enjoyment as the criteria for making choices and the strong relationship established between enjoyment and ability, brought attention to consideration of how students gained these perceptions. Student reporting of what they perceived as making a subject enjoyable highlighted the critical role of teachers in establishing a positive classroom environment. Perceptions of ability were found to be influenced by identity development, individual mindsets, environment and past experiences. The gaps in student, parent/caregiver and staff knowledge and understanding of learning pathways and qualification systems and the lack of attention given to long term study plans that emerged in the study raised concerns. Decisions based on enjoyment and ability alone, with little or no consideration of the influences on decision making or possible future directions are in danger of not being satisfactory in the long term.

Given perceptions are developed through social interactions, investigation of who middle school students interact with and how these interactions influenced subject-choice decision making showed that parents were the key informants; indirectly through influencing their child's values and interests or directly by determining choices available. Parents were also

the students' preferred advisors on subject choices. This finding highlights the importance of supporting parents through provision of up to date, accurate information. The role peers played in subject choice decisions was revealed through examining students' decision making behaviours. While students did not identify peers as important influences, they were found to be important sources of information on subjects and the school environment, particularly for Year 10 students.

In addition to individual factors, structural factors, such school organisation and wider curriculum were found to impact on students' subject choices. The study demonstrated that school resourcing dictated what subject options were available to students and how accessible these choices were for all students. This study asserts that the unique environment of a stand-alone middle school presents particular issues which are further exacerbated by resourcing limitations.

Key aspects for consideration in the format and timing of support for students making subject choices emerged in the study. Students voiced a desire to see the relevance of learning to their world and possible futures. Furthermore, students' suggestions that opportunities to explore and experience the wider world of work be available to all year levels, challenges the current provision of support in the school.

RECOMMENDATIONS

It is apparent that for students to make successful educational decisions they require competent decision making skills. For adolescent middle school students, in the throes of developing perceptions of identity and their personal world views, to develop such skills requires guidelines as to how to go about decision making, access to accurate information and on-going support along the way. The addition of a decision tree in the option choice booklet identifying key factors to consider would be a useful starting point for student, parent and staff discussions. Given the lack of research undertaken by students when making subject choice decisions demonstrated in the study, explicit direction and on-going support may be required to scaffold students to undertake this.

The influence of attitudes and ability perceptions on subject choice decisions highlights the importance of students being able to manage their own learning. This is especially important where students are presented with the decision to choose between the security

of a known, easy subject or taking on new and challenging learning. A focus in assessment practices on increasing students' awareness of strengths, weaknesses and potential rather than on achievement grades would be beneficial to encouraging life-long learning.

Empowering students to take risks to overcome challenges can be fostered through provision of clear learning goals, constructive, timely feedback and discussion of next steps for learning. Alongside this there needs to be monitoring and scaffolding of learning to ensure that, when taking on such risks, students are supported to achieve success.

The study findings highlighted the need for students to see relevance in their learning for them to maintain engagement and motivation in their schooling. This entails understanding not only of how the learning benefits them currently but, importantly, of how it will benefit them in the future. Encouraging awareness of transferrable skills learnt in disciplines of knowledge across subjects and connecting learning to the real world will assist students to see the relevance of learning for achieving their aspirations.

The study established a need for students to develop an individual study plan which considered possible future goals. As students and research pointed out, the middle school years are ones of change and exploration, so any study plan requires consideration of the student as an individual and continuing review to ensure changing individual needs are being met. Students identified Whānau (home room) teachers as being the member of the school staff who they were able to form a bond with over their time in the school. Given teachers play lack of knowledge and understanding of qualification systems identified in the study, it is important that they are given professional development to up-skill them for this role. A school-wide approach would encourage the holistic and cohesive delivery of advice and provision of information to students and families. In addition, the profile of the Careers Teacher in the school needs to be raised. Professional development about new career opportunities would enhance their ability to guide students in future planning.

The stand-alone middle school presents unique issues for student development of future study plans and provision of information and advice on learning pathways. With students moving on to other schools for the senior years, it is important that they are given opportunities to research and consider all the options available to them in order to be able to make appropriate subject choice decisions for Year 11 and beyond. An information evening for students, parents and whānau, where opportunity is given to review

information from all schools offering senior years' programmes would be a useful addition to the subject choice support given to students. However, it would be pertinent here to heed students' calls for clear, honest, "not sugar-coated" information to be provided by contributing schools and their desire for opportunities to try out subjects before making choices. Furthermore, given the range of different school options for students for the senior years, students would be best served by having individual guidance to negotiate the evaluation of the relevance and appropriateness of information they gather. Such actions will require close collaboration between schools in the community.

Parents' key role as informants for subject choice decisions and their identified lack of knowledge of qualification systems and learning pathways highlights the need to ensure that information and support is made available to them. Given that parents identified the school as their main source of information, it is important to maintain and establish clear communication pathways between student, parent, whānau and school. The existing school parent groups and school website could be useful forums to discuss information needs and appropriate formats for delivery. Furthermore, collaboration with the wider community could provide opportunities to identify resources which might be harnessed to support the school to provide experiences for students beyond school, such as collaborations with local businesses and tertiary institutions, cadetships and apprenticeships.

Older students, siblings and peers were identified in the study as having an influence on subject choice decisions. Utilisation of the student leadership opportunities existing in the school could be made to enlist and develop student leaders to collaborate with teachers on developing decision making guidelines and mentor students in their subject choice decisions. Setting up connections with young school leavers and graduates to serve as role models could also be established using the school alumni network.

Being able to provide courses which match students' interests is an on-going and acknowledged issue in schools. A closer look at initiatives to provide choice to students and how these are presented to students may provide some useful alternatives to current provision. With future directions and careers playing an increasingly important role in middle school student subject choices, any review of the curriculum or structures needs to consider how it can better provide students with appropriate and accessible information to make informed decisions. Reviewing the curriculum offer and provision of support must

consider also whether they are reflecting student needs rather than perpetuating traditional pathways. Increasing student awareness of support for careers within the school will be important in this.

Students identified having exposure to a variety of opportunities to observe and experience a range of occupations as helpful to them when thinking about future planning. Expanding opportunities to attend Career Expos to all middle school year levels would provide students with such opportunities. Furthermore, attendance across year levels would provide students motivation to review former plans against new perceptions and learning.

Student voice provides a valuable perspective in discussions on learning and decision making. Their observations and suggestions have provided valuable and useful information to assist the school to respond to their changing needs. Increasing the opportunities for students to be involved in review and development processes within the school would empower students to take greater ownership and management of their learning.

LIMITATIONS

While this study serves to give an overview of the student perceptions and experiences of the subject choice process at the school, the small number of participants limits the ability to make generalisations across the wider population. This is particularly the case in regards to the parent/caregiver and school staff population samples. The participants were all volunteers and so reflect an interest in the topic, thus they may not provide a representative sample. Ethnicity grouped data were able to indicate possible trends, however, the small sample sizes prevented generalisation across the wider population.

While a whole school survey would provide collection of data of significant ethnicity groups within the school, the school's limited numbers in some ethnicity groups, particularly Māori and Pasifika, would necessitate a wider sampling to collect data able to be generalised across the general population.

The sampling was undertaken at only one site. While findings are able to be used to describe the situation at this site, it may not represent the situations in other stand-alone middle schools, limiting generalisation of findings across sites. However the findings do provide a useful base for comparison for future studies at other sites. This study collected

data during one subject choice cycle providing an isolated snapshot of decision making at a particular time in a student's educational journey

While every effort was made to limit power imbalances and bias in the data collection and analysis the researcher's position as a teacher at the study site may have influenced responses. A future study with an independent researcher would enable comparison of data to establish its level of independence.

CONSIDERATIONS FOR FUTURE RESEARCH

Conducting a similar study in other middle schools would provide information from a larger population sample to which the study's findings could be compared, allowing for further testing of the reliability and validity of the findings and generalisation across the wider population.

Longitudinal studies would provide data on how decision making was experienced and changed over time and how changes in school structures impacted on subject choices. While the study gave an overview of how students at the different year levels made subject choices, a longitudinal study, examining individual students' decision making as they moved through the middle school years, would provide insight into how specific influences affect decision making, how students' behaviours changed over time and how changes in school structures impact on student choices. Such a study would also provide information to evaluate how early subject choices impacted on future learning pathways.

Future investigation into information given to students by parents for educational decision making using a larger sample population would provide more information on possible gaps in their knowledge and understanding identified in this study. Investigation into the interactions of decision makers and peers when making subject choices would provide useful information on how best to utilise these interactions for supporting middle school students.

A repetition of this study in other middle schools could serve to identify unique characteristics of the middle school in responding to adolescent decision making needs to inform innovative curriculum design and provision. Investigation of provision and effectiveness of interventions to assist students in educational decision making used in other middle and secondary schools may provide information to help address issues raised

in the study. How Level 1 NCEA pre-requisites, whether actual or perceived, impact on student subject choices for Year 10 would be a useful future investigation. How the funding and resourcing allocations of the stand-alone middle school impact on this issue would be worthy of future study.

While the study indicated some relationship between ethnicity and influences and factors considered in subject choices, generalisations could not be made due to the small sample size. A future study using a larger ethnic sample would test whether these indications were representative of the groups.

RESEARCHER'S REFLECTIONS

My experience of working within systems employing the traditional approach to curriculum provision and subject choice processes, with their inadvertent reinforcing of traditional learning pathways and limitation of choice, provided me opportunity to examine and reflect on how well these systems met the learning needs of our students. The obvious next step of asking the students themselves this question has been the basis of this postgraduate study.

The experiences recounted and perceptions revealed by students in the study provide valuable information to school and policy advisors to assist them to respond to student needs in the middle school years. The focus on student voice in the study emphasised the need to place students at the centre of teaching and learning and allowed them to be directly involved in decisions relating to their own learning.

This study served to fill a gap identified in the research by giving attention to students' decision making in a stand-alone middle school environment and has provided insights from this distinctive educational setting that complement previous research into student decision making. Teachers, school leaders, parents and policy makers must listen to the students if we want to equip our young people to be able to make satisfying and successful educational decisions. As we walk alongside them on their learning pathway we must collaborate to be ready and able to encourage and support them to be their best possible selves.

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APPENDICES

APPENDIX A: Ethics documents, information sheets and consent documents

Appendix A1.1: Māori Kaumatua Information Letter



Mātua [REDACTED]

C/- [REDACTED] Board of Trustees

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Tēnā koe Mātua [REDACTED],

I am Iona Bonney, a teacher and Head of Learning area at [REDACTED]. I am currently studying for a Master of Education through Massey University. I am interested in strategies to better prepare students to make informed, successful subject choice decisions. I will be conducting surveys and focus group interviews at [REDACTED]. I would like to ensure that Māori students in the school and their whānau are provided with all the information required to help them participate in the study and that protocols are maintained throughout the project. I would appreciate any advice and guidance you may be able to share with me. Below is a brief outline of the study project.

Nāku i runga i aku mihi ki a koe

Iona Bonney

Research Study on Middle School Student Views and Influences on Subject Choice Decision Making

Who will be involved?

Year 8, Year 9 and Year 10 students will be invited to share their views and experiences around choosing option subjects. Staff and whānau will be invited to complete an on-line

questionnaire to provide a background to the world in which students are making their decisions.

What will participation involve?

In Term 2 2015, Year 8, Year 9 and Year 10 students will be invited through whanau assemblies to complete a questionnaire about how they make subject choices. The questionnaire will be conducted on-line through the school network and will take approximately 15 minutes to complete. It will take place at a time approved by the Principal, teachers and classes involved.

The questionnaire will include an invitation for students to participate in small group interviews. These interviews will be held at [REDACTED] during the school day at a time approved by the Principal, parents, participating students and teachers. Not all students who volunteer may be chosen to take part in the discussion group. Final selection will be made to provide a cross section of the school population. Students will be given the option of using drawings to further illustrate verbal responses. These drawings may be copied to assist in analysis of data and illustrate findings.

What will happen to information collected?

Focus group participants will be given opportunity to review and comment on interpretation of their own responses. Access to an on-line summary of the study's findings will be made available to participants at the completion of the study. All data will be made anonymous by using confidential coding. Data will be stored securely for at least 1 year. The results of the project may be published. No names or material that could personally identify students or their whānau will be used in any reports.

Massey University Institute of Education supervisors will be responsible for the eventual disposal of any personal information held on the participants (such as contact details, audio recordings after they have been transcribed and copied drawings).

Who will benefit from the study?

The study will give students the opportunity to share their experiences of choosing option subjects. It will provide a valuable insight into the influences on students when choosing

subjects and the information they consider. This will assist the school to provide better information and resources to support students and families.

Do students have to take part?

Students are under no obligation to complete the questionnaire or participate in the group interview. They can withdraw from the study at any time without consequence.

Project Contacts

If you have any questions or queries regarding the study please feel free to contact the researcher directly:

[iona.bonney@\[REDACTED\]](mailto:iona.bonney@[REDACTED])

or supervisors:

Jenny Poskitt j.m.poskitt@massey.ac.nz

Jeanette Berman j.berman@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/87. If you have any concerns about the conduct of this research, please contact Dr. Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 84459, email humanethicsoutha@massey.ac.nz.

Appendix A1.2: Research Information Sheet



Research Study on Middle School Student Views and Influences on Subject Choice Decision Making

STUDY INFORMATION SHEET

Researcher Introduction

I am Iona Bonney, Head of the Arts Learning Area at [REDACTED]. This study is part of a Master's Thesis I am currently undertaking on a part time basis through Massey University.

Project Description and Invitation

My research focuses on how middle school students experience and perceive educational decision making with particular attention to making subject choices within the middle school environment. To do this I will be inviting Year 8, Year 9 and Year 10 students to complete a questionnaire on their experience of the subject choice making process. Students will also be invited to participate in focus group interviews to provide opportunity for more in-depth responses and views to be explored. Staff and parents/ caregivers of focus group students will be invited to complete a questionnaire and government and school documents will be reviewed to establish the context within which students are making their decisions.

Project Procedures

The questionnaires will be conducted on-line through the school network and will take approximately 15 minutes to complete. Focus group interviews will be undertaken at [REDACTED] at a time and venue approved by the Principal and teachers affected.

What will happen to information collected?

The information collected will be used to provide a background to the students' decision making. Access to an on-line summary of project findings will be made available to interested parties at the completion of the study. All data will be made anonymous by using confidential coding. Data will be stored securely for at least 1 year. The results of the project may be published. No names or material that could personally identify participants will be used in reports. Massey University Institute of

Education supervisors will be responsible for the eventual disposal of any personal information held on the participants (such as contact details, audio recordings after they have been transcribed and copied drawings).

Who will benefit from the study?

Information gathered will assist schools to better support students and families through providing relevant information and resources.

Is participation voluntary?

Participation is entirely voluntary.

If you have any questions or queries regarding the study please feel free to contact the researcher directly

[iona.bonney@\[REDACTED\]](mailto:iona.bonney@[REDACTED])

or supervisors:

Jenny Poskitt j.m.poskitt@massey.au

Jeanette Berman j.berman@massey.au

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/87. If you have any concerns about the conduct of this research, please contact Dr. Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 84459, email humanethicsoutha@massey.ac.nz.

Appendix A 1.3: School Management Information Sheet



MASSEY UNIVERSITY
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TE KURA O TE MATAURANGA

Research Study on Middle School Student Views and Influences on Subject Choice Decision Making

STUDY INFORMATION SHEET FOR SCHOOL MANAGEMENT

Researcher Introduction

I am Iona Bonney, Head of the Arts Learning Area at [REDACTED]. This study is part of a Master's Thesis I am currently undertaking on a part time basis through Massey University.

Project Description and Invitation

My research focuses on how middle school students experience and perceive educational decision making with particular attention to making subject choices within the middle school environment. To do this I will be inviting Year 8, Year 9 and Year 10 students to complete a questionnaire on their experience of the subject choice making process. Students will also be invited to participate in focus group interviews to provide opportunity for more in-depth responses and views to be explored. Staff and parents/ caregivers of focus group students will be invited to complete a questionnaire and government and school documents will be reviewed to establish the context within which students are making their decisions.

I am approaching the Board of Trustees of [REDACTED] as I wish to use the school as the base for my study.

Participant Identification and Recruitment

I wish to be able to access the school data base to identify student year group cohorts and obtain gender and ethnicity information. I would like to invite initial student participation through a whanau assembly. Classroom teachers will be asked to administer the questionnaire to avoid any perceived conflict of interest through my dual role as teacher at the school and researcher. An invitation to participate in the focus group is contained in the student questionnaire. Not all students who volunteer may be chosen to take part in the discussion group. Final selection will be made to provide a cross section of the school population.

Staff and parents/caregivers with direct association with the student focus group participants will be invited to participate by the researcher. Participants can withdraw from the study at any time without consequence. Participants will be given the option to provide responses through alternative methods (individual interview or email responses) if they do not feel comfortable with the focus group setting.

Cultural and social protocols will be adhered to through consultation with school staff responsible for pastoral and cultural welfare of the students. Information and opportunities for interested parties to ask questions will be made available through school parent/caregiver forums.

Project Procedures

The questionnaires will be conducted on-line through the school network and will take approximately 15 minutes to complete. This will take place at a time approved by the Principal and teachers affected. Focus group interviews will be undertaken at [REDACTED] at a time and venue approved by the Principal and teachers affected. Students will be given the option of using drawings to further illustrate verbal responses. These drawings may be copied to assist in analysis of data and illustrate findings.

Data Management

Focus group participants will be given opportunity to review and comment on interpretation of their own responses. All data will be made anonymous by using confidential coding. Data will be stored securely for up to 1 year. The results of the project may be published. No names or material that could personally identify participants or the school will be used in any reports. Data gathered will be used to identify influences and needs perceived as important to student subject choice decisions from the viewpoints of the major stakeholders; students, parents/caregivers, teachers, community, school and government policy makers. All data collected will be archived in password protected digital formats. Consent forms will be stored securely for one year before being destroyed. Access to an on-line summary of project findings will be made available to interested parties.

Participant's Statement of Rights

The school is under no obligation to accept this invitation. I very much hope that the school will be able to take part in this study. I thank you in advance for your time and assistance with this project.

If the school accepts the invitation to participate then please confirm this in writing. If you have any questions or queries regarding the study please feel free to contact the researcher directly

[iona.bonney@\[REDACTED\]](mailto:iona.bonney@[REDACTED])

or supervisors:

Jenny Poskitt j.m.poskitt@massey.au

Jeanette Berman j.berman@massey.au

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/87. If you have any concerns about the conduct of this research, please contact Dr. Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 84459, email humanethicsoutha@massey.ac.nz.

Thank you for your consideration. I look forward to a prompt response.

Iona Bonney

Te Kūnenga
ki Pūrehuroa

Institute of Education

Private Bag 102904, North Shore, Auckland 0745, New Zealand T 09 414 0800 F 09 443 9717 www.massey.ac.nz

Appendix A1.4: Student information sheet



Research Study on Middle School Student Views and Influences on Subject Choice Decision Making

STUDY INFORMATION SHEET FOR STUDENTS

I am Iona Bonney, teacher at [REDACTED]. This study is part of a Master's Thesis I am currently undertaking through Massey University. I am gathering information to help teachers and schools better inform and prepare their students to make decisions about subject choices and study plans, both now and in the future. In particular, I am gathering information on students' experience of choosing subjects at a middle school.

What will I be asked to do?

Small groups of students from each year level will be interviewed. You will be asked to discuss what you think about the subject choices you have to make and how you go about choosing them. This interview will take about 30-40 minutes and will be at school during the school day. I may also collect written or drawn ideas used in the focus group..

Who else is involved?

I will also be inviting your parents/caregivers and teachers at your school who are involved with the subject choice process to complete a questionnaire

What will happen to the information I give?

Anything you tell me will be kept anonymous. Your teachers will not know what you say; only the researcher will know. I will be writing about what you and other people say in some reports. I will not use your name. Discussion group participants will be given opportunity to review and comment on interpretation of their own responses. Your school will get a copy of the reports I write.

Do I have to take part?

I would really appreciate your help with this project. You have the right to decline to answer any question. When the time for the group interview arrives you can decide not to be part of the interview even if you have already said you will.

Who will benefit from this project?

You will be helping us to find out more about how teachers can make learning better for students. This information could help the teachers at your school and other schools.

What do I do next?

If you want to be part of the group interview please fill in the consent form and give it to your teacher. I will also give you a letter and a form to take home to your parents. If you have any questions about this project, please contact Ms. Bonney email:

[iona.bonney@\[REDACTED\]](mailto:iona.bonney@[REDACTED])

Project Contacts

If you have any questions or queries regarding the study please feel free to contact the researcher directly:

[iona.bonney@\[REDACTED\]](mailto:iona.bonney@[REDACTED])

or supervisors:

Jenny Poskitt j.m.poskitt@massey.ac.nz

Jeanette Berman j.berman@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/87. If you have any concerns about the conduct of this research, please contact Dr Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 84459, email humanethicsoutha@massey.ac.nz.

Thank you very much.

Ms Iona Bonney Researcher

Appendix A 1.5: Parent of Focus Group participant Information Sheet



MASSEY UNIVERSITY
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Research Study on Middle School Student Views and Influences on Subject Choice Decision Making

PARENT/ CAREGIVER of FOCUS GROUP PARTICIPANT INFORMATION SHEET

Researcher Introduction

I am Iona Bonney, a teacher and Head of Learning area at [REDACTED]. I am currently studying for a Master's in Education through Massey University. I am interested in strategies to better prepare students to make informed, successful educational decisions such as subject choices.

My research focuses on how middle school students' experience and perceive educational decision making with particular attention to making subject choices within the middle school setting. Year 8, Year 9 and Year 10 students at the school have been surveyed on aspects influencing choosing option subjects. Parents/caregivers of focus group students will be surveyed to provide a background to the world students are making their decisions in.

I am approaching you because your child has participated in one of the focus group interviews.

What will participation involve?

If you agree to take part you will be asked to complete a short on-line questionnaire about your experience of assisting your child to choose option subjects. This will take approximately 15 minutes.

What will happen to information collected?

The information you give will be used to provide a background to the students' decision making. Access to an on-line summary of project findings will be made available to interested parties at the completion of the study. All data will be made anonymous by using confidential coding. Data will be stored securely for at least 1 year. The results of the project may be published. No names or material that could personally identify you or your child will be used in reports. Massey University Institute of Education supervisors will be responsible for the eventual disposal of any personal information held on the

participants (such as contact details, audio recordings after they have been transcribed and copied drawings).

Who will benefit from the study?

Information gathered will assist schools to better support students and families through providing relevant information and resources.

Do I have to take part?

Your participation is entirely voluntary. You can choose not to take part, or withdraw from the study at any time. This will not affect future education or care of your child in any way.

Completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question.

If you agree, please access the questionnaire at (link address) and complete by

Project Contacts

If you have any questions or queries regarding the study please feel free to contact the researcher directly:

iona.bonney@ [REDACTED]

or supervisors:

Jenny Poskitt j.m.poskitt@massey.ac.nz

Jeanette Berman j.berman@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/87. If you have any concerns about the conduct of this research, please contact Dr. Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 84459, email humanethicsoutha@massey.ac.nz.

I hope you will be able to complete the questionnaire. Thank you for your consideration and time.

Iona Bonney

Appendix A1.6 Parent participant information form



MASSEY UNIVERSITY
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Research Study on Middle School Student Views and Influences on Subject Choice Decision Making

PARENT/ CAREGIVER PARTICIPANT INFORMATION SHEET

Researcher Introduction

I am Iona Bonney, a teacher and Head of Learning area at [REDACTED]. I am currently studying for a Master's in Education through Massey University. I am interested in strategies to better prepare students to make informed, successful educational decisions such as subject choices.

My research focuses on how middle school students' experience and perceive educational decision making with particular attention to making subject choices within the middle school setting. Year 8, Year 9 and Year 10 students at the school have been surveyed on aspects influencing choosing option subjects. Parents/caregivers of focus group students will be surveyed to provide a background to the world students are making their decisions in.

I am approaching you because your child has participated in one of the focus group interviews.

What will participation involve?

If you agree to take part you will be asked to complete a short on-line questionnaire about your experience of assisting your child to choose option subjects. This will take approximately 15 minutes.

What will happen to information collected?

The information you give will be used to provide a background to the students' decision making. Access to an on-line summary of project findings will be made available to interested parties at the completion of the study. All data will be made anonymous by using confidential coding. Data will be stored securely for at least 1 year. The results of the project may be published. No names or material that could personally identify you or your child will be used in reports. Massey University Institute of Education supervisors will be responsible for the eventual disposal of any personal information held on the

participants (such as contact details, audio recordings after they have been transcribed and copied drawings).

Who will benefit from the study?

Information gathered will assist schools to better support students and families through providing relevant information and resources.

Do I have to take part?

Your participation is entirely voluntary. You can choose not to take part, or withdraw from the study at any time. This will not affect future education or care of your child in any way.

Completion and return of the questionnaire implies consent. You have the right to decline to answer any particular question.

If you agree, please access the questionnaire at [Parent survey](#) and complete by Friday 26 June 2015.

Project Contacts

If you have any questions or queries regarding the study please feel free to contact the researcher directly:

iona.bonney@ [REDACTED]

or supervisors:

Jenny Poskitt j.m.poskitt@massey.ac.nz

Jeanette Berman j.berman@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/87. If you have any concerns about the conduct of this research, please contact Dr. Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 84459, email humanethicsoutha@massey.ac.nz.

I hope you will be able to complete the questionnaire. Thank you for your consideration and time.

Iona Bonney

Appendix A2.1: Parent digital consent for child's participation in study

Research Study on Middle School Student Views and Influences on Subject Choice Decision Making

* Required

INFORMATION SHEET FOR PARENTS/ CAREGIVERS OF STUDENT PARTICIPANTS

I am Iona Bonney, a teacher and Head of Learning area at [REDACTED]. I am currently studying for a Master of Education through Massey University. I am interested in strategies to better prepare students to make informed, successful subject choice decisions.

Who will be involved?

Year 8, Year 9 and Year 10 students will be invited to share their views and experiences around choosing option subjects. Staff and parents/caregivers will be invited to complete an on-line questionnaire to provide a background to the world in which students are making their decisions.

What will participation involve?

In Term 2 2015, Year 8, Year 9 and Year 10 students will be invited through classroom teachers to complete a questionnaire about how they make subject choices. The questionnaire will be conducted on-line through the school network and will take approximately 15 minutes to complete. It will take place at a time approved by the Principal, teachers and classes involved. The questionnaire will include an invitation for students to participate in small group interviews. These interviews will be held at [REDACTED] during the school day at a time approved by the Principal, parents/caregivers, participating students and teachers. Not all students who volunteer may be chosen to take part in the discussion group. Final selection will be made to provide a cross section of the school population. Students will be given the option of using drawings to further illustrate verbal responses. These drawings may be copied to assist in analysis of data and illustrate findings.

What will happen to the information collected?

Access to an on-line summary of the study's findings will be made available to participants at the completion of the study. All data will be made anonymous by using confidential coding. Data will be stored securely for at least 1 year. The results of the project may be published. No names or material that could personally identify your child will be used in any reports. Focus group participants will be given opportunity to review and comment on interpretation of their **own** responses.

Massey University Institute of Education supervisors will be responsible for the eventual disposal of any personal information held on the participants (such as contact details, audio recordings after they have been transcribed and copied drawings).

Who will benefit from the study?

The study will give students the opportunity to share their experiences of choosing option subjects. It will provide a valuable insight into the influences on students when choosing subjects and the information they consider. This will assist the school to provide better information and resources to support students and families.

Do my son/ daughter have to take part?

Your son/ daughter is under no obligation to complete the questionnaire or participate in the group interview. They can withdraw from the study at any time without consequence. *

Please indicate below whether or not you consent to your child/ ren participating in this research study.

- I consent to my child/ children participating in this research study.
- I do not consent to my child/ children participating in this research study.

Project Contacts

If you have any questions or queries regarding the study please feel free to contact the researcher directly:

[iona.bonney@\[REDACTED\]](mailto:iona.bonney@[REDACTED])

or supervisors:

Jenny Poskitt j.m.poskitt@massey.ac.nz

Jeanette Berman j.berman@massey.ac.nz

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/87. If you have any concerns about the conduct of this research, please contact Dr Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 84459, email humanethicsoutha@massey.ac.nz.

Submit

Appendix 2.2: Student focus group consent form



MASSEY UNIVERSITY
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Research Study on Middle School Student Views and Influences on Subject-Choice Decision Making

STUDENT DISCUSSION GROUP PARTICIPANT CONSENT FORM

If you disagree with any of these statements please put a cross (X) by them.

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree that the edited transcript and extracts from this may be used in reports and publications arising from the research.

I agree not to talk with others about what was talked about in the Discussion Group.

I agree to the discussion group being sound recorded.

I agree to my written notes and drawings created in the discussion group being copied.

I agree to the information collected being stored and being used in future studies.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:

Date:

.....

Full Name - printed

.....

APPENDIX B: Data collection documents

Appendix B1.1: Student questionnaire

Introduction

This questionnaire will collect information on how students make decisions on which school subjects to study. This could assist the school to better provide subject choices and information to assist you to choose subjects. All information collected will remain anonymous and confidential. Participation in the questionnaire is voluntary. You are encouraged to complete all questions. Completion of the questionnaire is taken as consent to participation. Your participation will be greatly appreciated.

The first whole class at each year level to complete the questionnaire will receive a bag of cookies. Simply complete and submit the survey. You are under no obligation to complete the survey

Part 1: Demographic information

Gender: Male Female
Ethnicity: New Zealand European Maori Pasifika Korean Chinese Other____
Year level: Year 8 Year 9 Year 10

Part A: You and your school subjects

1. How do you feel about your subjects this year?

Like a lot Like a lot, Like, Neither like nor dislike, don't like
English, Maths, Science, Social Studies, PE/ Health, Arts, Languages, Technology, Option 1, Option 2, Option 3

2. How good do you think you are at your subjects? Very good, Good Neither good nor not good Not good

English, Maths, Science, Social Studies, PE/ Health, Arts Languages, Technology, Option 1, Option 2, Option 3

3. How well do subjects offered match your interests?

Extremely well Quite well Well Not well at all

Part B: Choosing subjects

4. How did you decide the subjects you are now taking? (You may choose up to three responses)

I chose the subjects I'm most interested in
I chose the subjects I'm good at
I chose a range of subjects to keep my options open in the future
I need particular qualifications for what I want to do
I chose the subjects that would get me into university
I'm doing these subjects because my parents wanted me to
I'm doing these subjects because my teachers suggested them
I couldn't think of what else to do
I chose the subjects that my friends are doing
I chose the subjects that are easy
I didn't really think about it much
I am not doing any option subjects this year
I chose the subjects that would get me a job
Other

5. Have you changed your option subjects during a year?

If yes, please indicate why. You may indicate up to four reasons.

Have not changed option subjects, Did not enjoy subject, Not good at the subject, Parents/ caregivers wanted me to change, Moved to be with friends, Moved to be away from friends, Did not complete set work, Class did not run because of small numbers, Teacher recommendation, Course costs, Change of career direction, Don't know, Have not changed a subject, Other (Please specify) _____

6. Did you continue with your Year 9 option subjects this year?

If No, please say why not.

Continued with last year's option subjects, Did not enjoy subject, Timetable clashes, Class full, Not good at the subject, Parents/ caregivers wanted me to change, Not offered the following year, Class did not run because of small numbers, Teacher recommendation, Course costs, Change of career direction, Don't know, , not applicable, Other (Please specify) _____

7. Are you planning to continue with some/ all of your current subjects next year?

If not, why not?

Will continue with same subjects, Do not enjoy subject, Timetable clashes, Parents/ caregivers want me to change, Not offered at school next year, Teacher recommendation, Low grades in the subject, Course costs, Change of career direction, Do not fit with the qualifications I need for my chosen career direction, , Don't know, Other (Please specify) _____

8. Have you wanted to take a subject but not been able to do it?

If yes, why could you not do it?

Never been unable to take a subject, Timetable clashes, Class full, Did not have needed skills, Parents/ caregivers did not agree, Not available at this school, Not offered that year, Class did not run because of small numbers, Teacher recommendation, Course costs, Did not lead to a future qualification, Don't know, , Other (Please specify) _____

Part C: Influences on Subject Choices

9. How important are the following in influencing your subject choices?

Very important, Important, neither important nor unimportant, Not important Family, Friends, Grades/ exam results, Teachers, Community leader, Career plans, Enjoyment of subject, Media, Interests, Difficulty of subject, Work load in subject, Course content, Leads on to future studies, Having a range of subjects, Other

10. Did your parents like your subject choices?

Yes No Did not mind what I chose

Part D Sources of Information to help make subject choices

11. Do you feel you have enough information to make subject choices for next year?

Yes, I have all the information needed

I have some information

I have little information

No, I do not have enough information

. What other information would you like to have? _____

12. Who would you go to for advice to help you make subject choices? Yes Maybe No

Parents, Family members, Whanau teacher, Subject teacher, HOLA, Career's teacher, Friends, Students in higher classes, Community leaders, Next year's school staff, Don't know

Other _____

13. Did you use information from any of the following to make your subject choices?

How useful was the information they provided? Please give an answer for each item.

Did not use, Very useful, Useful, Neither useful nor not useful, Not useful

Course information booklets, School option evenings, subject teachers, whanau teachers, HOLA, school careers teacher, careers expo, websites, parents, friends, media, did not get any information, Other (please specify)

14. How helpful would the following be in assisting you to make subject choices? Please give an answer for each item.

Very helpful, Helpful, Neither helpful nor unhelpful, Not helpful

More subject choices, Fewer subject choices, Fewer compulsory subjects, Integration of subjects, Work experience opportunities, Career guidance advice, Greater student input into subjects offered, Information on the qualifications the subject can lead to, Information on the jobs the subject can lead to, Information on entry requirements for University/ Technical Training courses and apprenticeships, Information on the job market, Information on course content, workload requirements
Other (please specify) _____

15. What advice would you give a younger student/ friend who is trying to choose subjects?

Part E. Future Thinking

16. How confident do you feel about making subject choices for next year?

Extremely confident
Quite confident
Somewhat confident
Slightly confident
Not at all confident

Don't know

17. How important or unimportant is it for you to consider the following when making subject choices?

Very important, Important, Neither important nor unimportant, Unimportant, Very unimportant, Don't know

Study plans at senior school years, Qualifications needed for planned career, an idea of career direction, skills and attributes needed for planned career, practical skills useful for work

18. Which of these do you plan to do after Year 12?

Stay at school for Y13, Do a training course, Find a job, Other, Don't know

19. Which of these do you plan to do after Year 13?

Take up a training course, Find a job, Go to University/ technical college, Do an apprenticeship, Take a year off, Other, Don't know

20. Do you think you have enough information about NCEA courses at Year 11 and beyond?

Yes, I have enough information, I have some information, I have little information, No I do not have enough information, I do not think it is important for me at my current year level.

Career Plans

21. Have you decided on what job/ career you would like to do in the future? Yes No

22. What is qualification/s do you need to achieve to be able to work at that job/ career?
You may indicate more than 1 if applicable.

NCEA Level 2, NCEA Level 3, University Degree, University Diploma, Technical certificate, Work experience
None, Don't know, Other_____

23. How did you decide what career to take?

Based on what I'm most interested in, Based on my skills, Based on what would be the most satisfying and worthwhile, Based on the job with best career prospects, Based on the highest paid job, Based on who's the best employer, I'll take almost any job I'm offered, Based on what my family think, Based on what my friends are doing, Based on what my teachers' say I'm good at, Opportunity came up, Don't know, Other

24. Would your parents/ caregivers prefer you to take a different job/ career path?

Yes No They are unsure Don't know Haven't discussed it

Interview Request

Would you be interested in participating in a short focus group interview to discuss these topics further?

The interview would take place at school, during the school day and would take approximately 45 minutes. The interview group would consist of 6-10 students. Morning or afternoon tea will be provided.

This would be an opportunity for you to share your views on and experiences of making decisions on subject choices. This information could be used to improve the option choice process.

If you are interested please send me an email at the following address:

[iona.bonney@\[REDACTED\]](mailto:iona.bonney@[REDACTED])

I will contact you with further information and to set up an interview time within 5 days.

Thank you for sharing your views and giving your time to complete this survey. Your response has been recorded.

Appendix B1.2: Student questionnaire response summary

330 responses

Student survey Summary

Demographic Information

Gender

Male	135	41%
Female	194	59%

Year Level

Year 8	133	40.3%
Year 9	97	29.4%
Year 10	100	30.3%

Ethnicity

New Zealand European	224	69.1%
Māori	5	1.5%
Pasifika	2	0.6%
Korean	19	5.9%
Chinese	21	6.5%
Other	53	16.4%

You and Your School Subjects

1. How do you feel about your subjects this year

English

Like a lot	74	22.8%
Like	168	51.7%
Neither like nor dislike	72	22.2%
Don't like	11	3.4%

Maths

Like a lot	45	13.7%
Like	146	44.5%
Neither like nor dislike	95	29%
Don't like	42	12.8%

Science

Like a lot	82	25.2%
Like	144	44.2%
Neither like nor dislike	73	22.4%
Don't like	27	8.3%

Social Studies

Like a lot	26	8.2%
Like	141	44.5%
Neither like nor dislike	116	36.6%
Don't like	34	10.7%

PE/ Health

Like a lot	178	54.1%
Like	92	28%
Neither like nor dislike	38	11.6%
Don't like	21	6.4%

Arts

Like a lot	100	31.2%
Like	118	36.8%
Neither like nor dislike	74	23.1%
Don't like	29	9%

Language

Like a lot	26	8.4%
Like	110	35.4%
Neither like nor dislike	128	41.2%
Don't like	47	15.1%

Technology

Like a lot	89	28.7%
Like	105	33.9%
Neither like nor dislike	93	30%
Don't like	23	7.4%

Option 1

Like a lot	134	54.9%
Like	68	27.9%
Neither like nor dislike	38	15.6%
Don't like	4	1.6%

Option 2			
Like a lot	118	48.2%	
Like	75	30.6%	
Neither like nor dislike	47	19.2%	
Don't like	5	2%	

Option 3

Like a lot	118	48.2%
Like	73	29.8%
Neither like nor dislike	47	19.2%
Don't like	7	2.9%

2. How good do you think you are at your subjects?

English

Very good	60	18.6%
Good	179	55.6%
Neither good nor not good	73	22.7%
Not good	10	3.1%

Maths			
Very good	58	17.7%	
Good	180	54.9%	
Neither good nor not good	73	22.3%	
Not good	17	5.2%	

Science

Very good	56	17.3%
Good	182	56.2%
Neither good nor not good	71	21.9%
Not good	15	4.6%

Social Studies			
Very good	29	9.3%	
Good	166	53.2%	
Neither good nor not good	97	31.1%	
Not good	20	6.4%	

PE/ Health

Very good	88	27.2%
Good	143	44.1%
Neither good nor not good	67	20.7%
Not good	26	8%

Arts			
Very good	48	15.3%	
Good	143	45.7%	
Neither good nor not good	96	30.7%	
Not good	26	8.3%	

Languages

Very good	23	7.5%
Good	118	38.7%
Neither good nor not good	124	40.7%
Not good	40	13.1%

Technology			
Very good	45	14.7%	
Good	135	44.1%	
Neither good nor not good	104	34%	
Not good	22	7.2%	

Option 1

Very good	69	28.4%
Good	120	49.4%
Neither good nor not good	50	20.6%
Not good	4	1.6%

Option 3

Very good	61	25.1%
Good	118	48.6%
Neither good nor not good	60	24.7%
Not good	4	1.6%

Option 2

Very good	65	26.6%
Good	117	48%
Neither good nor not good	56	23%
Not good	6	2.5%

3. How well do the subjects offered match your interests?

Extremely well	33	10.3%
Quite well	162	50.6%
Well	115	35.9%
Not well at all	10	3.1%

Choosing Subjects

4. How did you decide the subjects you are now taking?

I chose the subjects I'm most interested in	192	60.2%
I chose the subjects I'm good at	68	21.3%
I chose a range of subjects to keep my options open in the future	92	28.8%
I need particular qualifications for what I want to do	29	9.1%
I chose the subjects that would get me into university	23	7.2%
I'm doing these subjects because my parents wanted me to	14	4.4%
I'm doing these subjects because my teachers suggested them	4	1.3%
I couldn't think what else to do	18	5.6%
I chose the subjects that my friends are doing	12	3.8%
I chose the subjects that are easy	2	0.6%
I didn't really think about it much	6	1.9%
I am not doing any option subjects this year	63	19.7%
I chose subjects that would get me a job	24	7.5%
Other	41	12.9%

6. Did you continue with last year's option subjects this year?

Continued with last year's option subjects	82	27.5%
Did not enjoy subject	38	12.8%

Not good at the subject	15	5%
Parents/ caregivers wanted me to change	9	3%
Timetable clashes	14	4.7%
Class full	14	4.7%
Subject not offered this year	14	4.7%
Class did not run because of small numbers	1	0.3%
Teacher recommendation	3	1%
Course costs	1	0.3%
Change of career direction	9	3%
Not available at this school	7	2.3%
Not doing option subjects this year	76	25.5%
Other	100	33.6%

7. Are you planning to continue with some/ all of your current subjects next year?

Will continue with the same subjects	127	41.1%
Do not enjoy subject	22	7.1%
Timetable clashes	6	1.9%
Parents/ caregivers want me to change	6	1.9%
Not offered at school next year	5	1.6%
Teacher recommendation	5	1.6%
Low grades in the subject	5	1.6%
Course costs	1	0.3%
Change of career direction	15	4.9%
Do not fit with the qualifications I need	14	4.5%
Don't know	115	37.2%
Other	59	19.1%

8. Have you wanted to take a subject but not been able to do it?

Never been unable to take a subject	73	24.7%
Timetable clashes	20	6.8%
Class full	48	16.3%
Did not have needed skills	12	4.1%
Parents/ caregivers did not agree	8	2.7%
Not offered at the school, Not offered that year	21	7.1%
Class did not run because of small numbers	4	1.4%

Teacher recommendation	5	1.7%
Course costs	2	0.7%
Did not lead to a future qualification	8	2.7%
Don't know	40	13.6%
Not doing option subjects this year	70	23.7%
Other	28	9.5%

Influences on Subject Choices

9. How important are the following in influencing your subject choices?

Family

Very important	135	42.6%
Important	130	41%
Neither important nor unimportant	42	13.2%
Not important	10	3.2%

Grades/ exam results

Very important	137	43.2%
Important	141	44.5%
Neither important nor unimportant	32	10.1%
Not important	7	2.2%

Community leader

Very important	17	5.5%
Important	91	29.4%
Neither important nor unimportant	143	46.1%
Not important	59	19%

Enjoyment of subject

Very important	180	57.3%
Important	113	36%
Neither important nor unimportant	20	6.4%
Not important	1	0.3%

Interests

Very important	182	58.1%
Important	118	37.7%
Neither important nor unimportant	10	3.2%
Not important	3	1%

Friends

Very important	66	20.8%
Important	129	40.7%
Neither important nor unimportant	93	29.3%
Not important	29	9.1%

Teachers

Very important	67	21.3%
Important	160	50.8%
Neither important nor unimportant	71	22.5%
Not important	17	5.4%

Career plans

Very important	132	41.9%
Important	139	44.1%
Neither important nor unimportant	39	12.4%
Not important	5	1.6%

Media

Very important	37	11.9%
Important	90	29%
Neither important nor unimportant	140	45.2%
Not important	43	13.9%

Difficulty of subject

Very important	31	10%
Important	134	43.1%
Neither important nor unimportant	112	36%
Not important	34	10.9%

Course content

Very important	64	20.7%
Important	165	53.4%
Neither important nor unimportant	73	23.6%
Not important	7	2.3%

Having a range of subjects

Very important	76	24.5%
Important	142	45.8%
Neither important nor unimportant	74	23.9%
Not important	18	5.8%

10. Did your parents like your subject choices?

Yes	123	38.3%
No	8	2.5%
Did not mind what I chose	67	20.9%
Don't know	30	9.3%
Not doing option subjects this year	93	29%

Work load in subject

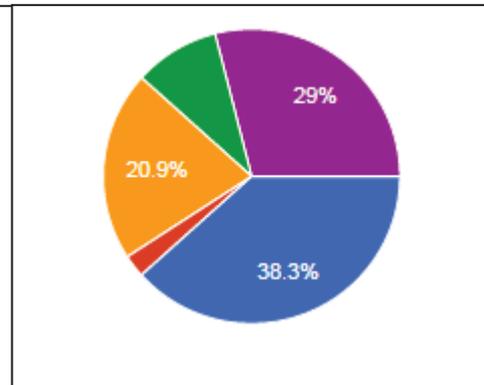
Very important	42	13.5%
Important	129	41.3%
Neither important nor unimportant	111	35.6%
Not important	30	9.6%

Leads on to future studies

Very important	118	37.8%
Important	143	45.8%
Neither important nor unimportant	41	13.1%
Not important	10	3.2%

Other

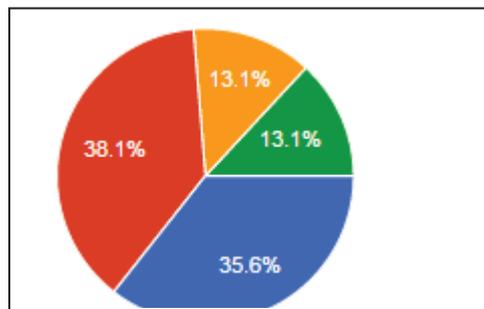
Very important	20	13%
Important	41	26.6%
Neither important nor unimportant	70	45.5%
Not important	23	14.9%



Sources of Information to help make subject choices

11. Do you feel you have enough information to make subject choices for next year?

Yes, I have all the information needed	111	35.6%
I have some information	119	38.1%
I have little information	41	13.1%
No, I do not have enough information	41	13.1%



What other information would you like to have?

- I would like to know what I want to end up doing in college so I can choose options that will steer me in the right direction

- Are we aloud to choose the technology or are the teachers are going to choose or we rate them and then the teachers are going to choose? which one is it?
- More about what it involves and careers it could lead into
- How hard the exams are
- Have some catch up classes in the library some lunches.
- Just an explanation on what each option has to offer to help me understand what some of the options are and what they can offer me for the future
- What is contained in the courses and the estimated work load of the option.
- what type of activities will be in that class
- Information about [REDACTED]
- I don't feel that I have gotten any information about subjects next year.
- I want to know what the choices are and whether they would be right for me. I want next years options to help me with a job
- I would like to know beforehand which subjects clash.
- I would maybe of liked abit more information on the subject i was gonna choose. Like under each subject have abit of an explanation on what we were gonna learn/do in that subject. It'd give people more information and have people taking more risks.
- It's not exactly information it's more about what type of job i want in the future for me.
- more information on what my ideal career requires me to have
- What do you do in 'The Arts' in year 9? How do you choose your subjects for next year?
- I don't even know how the option system for year 9s and 10s work, I would be interested to know all of the information I need.
- More examples of the things you might do. Not just the activity but how it teaches you in what way.
- N/A
- .
- I would be cool to know what sbujects the next school had so we knew in DETIAL what was coming
- What option subjects ther actually are
- What I would learn in the options and classes I take next year to help me for my career .
- A small guide line of the course. Like whats we are going to be doing through out the year with in that topic.
- maybe more about animal skills
- -
- More information about the subjects.
- More expos with ALL my choices displaied
- What options are at [REDACTED] and how many points.
- Nothing really
- How they will influence what I do in the future
- I would like to hear the options listed for next year :)
- info about each subject. what subjects will these subjects lead to in following years. Knowing what teacher I will get.
- Nothing else

- Where my option subjects chosen can lead to
- Maybe an overview of the topics that will be covered?
- I have not looked at the options offered at my next school yet, so I cannot make decisions yet
- More information about NCEA at senior high.
- What subjects there are and how many you can do.
- Just wanted to try more options
- The options evening has not been yet so i do not have much to add.
- don't know yet
- i really have no idea
- I really enjoy learning about my options.I have looked further into different options for next year.
- i would like to know what classes to take so i can have the right ncea qualifications next year
- what I could pick and choose and what I can't
- null
- What the subjects are !! And what you do in them?!
- I don't think I need much more information to be honest
- I would like to know what kind of classwork they do and the level of what they teach you. I would like to know if it will be good for me and it will help me in the future.
- A full list of subjects and possibly the task and work given in the class and major assignments
- What subjects will there be?
- what subjects would be available because of the choices I had for this year
- What you do in the subject
- Who is the teacher running it? What kinds of things do they do? Do the children currently doing this like it? do they enjoy it? What kind of homework is given?
- What you do in all of the different options.
- Not sure yet
- I just learn english
- what the options are
- nothing
- Information about [REDACTED] subject options.
- What does [REDACTED] have??
- What subjects are there
- What the expectations are to pass the Class
- Go to classes I missed out on as a year 7 (came later).
- nothing really all i needed were the option names
- What the teachers are going to be like next year, what is included in the exams.
- Maybe a brochure
- ??
- What the subjects are.
- What option subjects can i choose next year?
- Explanation of each subject
- What subjects there are to choose from
- none

- More about what each subject has to offer
- My future career choice
- none :) apart from what subjects i can take next year
- I just would like to know about the subject, how much homework you get and what exactly you do in the subject.
- what I can do with the option choices i choose, like future careers
- I would like to know what options my next School () has. As I can start to focus on what I would like to do and take it further into my life.
- im fine with the information at hand
- how many subjects we can choose.
- None because I am going to another school next year.
- what all the subjects teach you
- What i would like to do.
- None I know what I'm doing
- What qualifications you need to have in university for the jobs I'm interested in
- More information about careers paths, about what options will actually help me reach where I want to be.
- I dont know
- What subjects there are?
- To be able to know what kind of things i'll be doing.
- How much the courses would cost.
- I just need general information on how I am doing in subjects Which ones would help me more for my goals in the future
- I would like to know what the options are for year 9 for next year
- Any
- What the subject choices are.
- about the different things you are going to learn in the subject
- the year 9 10 kids get really annoying please do some thing about it
- Not much, because there is already a lot of information that I can use
- What subjects are needed for particular careers.
- I don't really know what subjects their are. I will probably choose subjects that I'm good at and I am interested in.
- I have not received any information about year 9 options.
- Don't really know
- I would like to know what new subjects if any are being offered.
- More infomation
- I would like to have an assembly kind of event to go over the option with the school because on the website I don't feel like people actually know what they will be doing in the option
- the structure of the year and the projects that are throughout.
- what the assessments will be about and what is in the exams
- What happens in the other options next year.
- The topics we cover in subjects and exam related topics

- all of the subjects description and outline
- on how to help other people
- What I'll be doing in the subject

12. Who would you go to for advice to help you make subject choices?

Parents

Yes	228	72.2%
Maybe	77	24.4%
No	11	3.5%

Family members

Yes	151	48.4%
Maybe	132	42.3%
No	29	9.3%

Whanau teacher

Yes	43	13.7%
Maybe	160	51.1%
No	110	35.1%

Subject teacher

Yes	112	35.8%
Maybe	152	48.6%
No	49	15.7%

HOLA

Yes	41	13.2%
Maybe	155	50%
No	114	36.8%

Career's teacher

Yes	58	18.8%
Maybe	163	52.8%
No	88	28.5%

Friends

Yes	127	40.3%
Maybe	137	43.5%
No	51	16.2%

Students in higher classes

Yes	62	20.1%
Maybe	129	41.9%

Community leaders

Yes	9	3%
Maybe	116	38.3%
No	178	58.7%

Next year's school staff

Yes	27	8.9%
Maybe	118	38.9%
No	158	52.1%

Don't know

Yes	22	11.5%
Maybe	78	40.6%
No	92	47.9%

13. Did/ Will you use information from any of the following to make your subject choices?

Course information booklets

Did not use	76	26.6%
Very useful	48	16.8%
Useful	104	36.4%
Neither useful nor not useful	46	16.1%
Not useful	12	4.2%

School option evenings

Did not use	51	17.7%
Very useful	95	33%
Useful	103	35.8%
Neither useful nor not useful	32	11.1%
Not useful	7	2.4%

Subject teachers

Did not use	52	17.9%
Very useful	64	22.1%
Useful	130	44.8%
Neither useful nor not useful	36	12.4%
Not useful	8	2.8%

School option evenings

Did not use	51	17.7%
Very useful	95	33%
Useful	103	35.8%
Neither useful nor not useful	32	11.1%
Not useful	7	2.4%

HOLA

Did not use	88	31.8%
Very useful	18	6.5%
Useful	82	29.6%
Neither useful nor not useful	66	23.8%

Careers teacher

Did not use	90	31.6%
Very useful	37	13%
Useful	87	30.5%
Neither useful nor not useful	57	20%
Not useful	14	4.9%

Not useful **23** 8.3%

Careers expo

Did not use **94** 33.2%
 Very useful **34** 12%
 Useful **91** 32.2%
 Neither useful nor not useful **51** 18%
 Not useful **13** 4.6%

Parents

Did not use **32** 11.1%
 Very useful **123** 42.7%
 Useful **92** 31.9%
 Neither useful nor not useful **36** 12.5%
 Not useful **5** 1.7%

Media

Did not use **76** 27%
 Very useful **30** 10.7%
 Useful **88** 31.3%
 Neither useful nor not useful **59** 21%
 Not useful **28** 10%

Websites

Did not use **66** 23.3%
 Very useful **54** 19.1%
 Useful **106** 37.5%
 Neither useful nor not useful **41** 14.5%
 Not useful **16** 5.7%

Friends

Did not use **39** 13.6%
 Very useful **85** 29.6%
 Useful **108** 37.6%
 Neither useful nor not useful **41** 14.3%
 Not useful **14** 4.9%

Did not get any information

Did not use **76** 40.4%
 Very useful **15** 8%
 Useful **38** 20.2%
 Neither useful nor not useful **28** 14.9%
 Not useful **31** 16.5%

Other (Please specify)

- none
- I haven't had a subjects meeting yet
- Haven't got any information
- Myself
- interests
- Haven't been handed any booklets
- I have not thought about subjects next year, I am still enjoying Year 8
- Have not had these opportunities yet.

**14. How helpful would the following be in assisting you to make subject choices?
 More subject choices**

Very helpful	107	34.7%
Helpful	118	38.3%
Neither helpful nor not helpful	63	20.5%
Not helpful	7	2.3%
Don't know	13	4.2%

Fewer subject choices

Very helpful	6	2%
Helpful	40	13.5%
Neither helpful nor not helpful	98	33.1%
Not helpful	128	43.2%
Don't know	24	8.1%

Fewer compulsory subjects

Very helpful	59	19.5%
Helpful	98	32.5%
Neither helpful nor not helpful	79	26.2%
Not helpful	41	13.6%
Don't know	25	8.3%

Integration of subjects

Very helpful	20	6.9%
Helpful	89	30.7%
Neither helpful nor not helpful	108	37.2%
Not helpful	26	9%
Don't know	47	16.2%

Work experience opportunities

Very helpful	105	35%
Helpful	129	43%
Neither helpful nor not helpful	38	12.7%
Not helpful	7	2.3%
Don't know	21	7%

Career guidance advice

Very helpful	94	31.3%
Helpful	113	37.7%
Neither helpful nor not helpful	58	19.3%
Not helpful	14	4.7%
Don't know	21	7%

Greater student input into subjects offered

Very helpful	58	19.8%
Helpful	119	40.6%
Neither helpful nor not helpful	69	23.5%
Not helpful	15	5.1%
Don't know	32	10.9%

Information on the qualifications the subject can lead to

Very helpful	102	34.9%
Helpful	125	42.8%
Neither helpful nor not helpful	41	14%
Not helpful	4	1.4%
Don't know	20	6.8%

Information on entry requirements for University/ Technical Training courses and apprenticeships

Very helpful	110	37.3%
Helpful	115	39%
Neither helpful nor not helpful	43	14.6%
Not helpful	5	1.7%
Don't know	22	7.5%

Information on course content

Very helpful	96	33%
Helpful	124	42.6%
Neither helpful nor not helpful	44	15.1%
Not helpful	3	1%
Don't know	24	8.2%

Information on workload requirements

Very helpful	80	27.3%
Helpful	109	37.2%
Neither helpful nor not helpful	67	22.9%
Not helpful	15	5.1%
Don't know	22	7.5%

Other:

I think all of those are great, but I would like to hear from other's perspectives what I excel in and what I could work on, I would compare these to what I would like, what works, and what is available and I would base my final decisions on that.

family members and friends

none

15. What advice would you give a younger student/ friend who is trying to choose subjects?

- Do the ones you enjoy the most. Chose the ones that will be helpful to your future
- Chose carefully, think if you would enjoy that class and want to go and learn/participate. Have some sort of idea what job you would like to do when you are older or what you would like to study in university.
- choose what you are interested in
- maybe choice japanese or spanish for if you get a scholarship then it will become very useful
- Do the ones that you tjink you will be good at
- Just choose things that enjoy and that you are good at.
- Remember that it is your choice, and nobody else is to choose for you. Other people can give you advice, but in the end it is your choice. Think about what you want to do in the future, and look at your test/exam results to see your strengths and weakness', and what you want to do.
- go for the ones you think you'll enjoy
- think of what you want to do in the future.
- To do what you love to do or something new that appeals to you that maybe You've never tried before
- Ask the teacher about the subject
- go for the ones you like and know you'll enjoy
- Stick to what you feel you could see yourself doing or love doing or want to find more about..
- Do what you enjoy, and would make a good job for in the future, not just what your friends are doing
- Choose the subject that he/she like.
- Choose something you enjoy and want to do. Don't do the subjects you think you will not like
- Choose subjects that you like and will help you when you are getting a job.
- chose the ones that sound interesting
- I have no idea yet since I have not started choosing subjects.
- Don't choose a subject with your friends choose a subject you like and want to do.?

- Go for something you're both interested in and that can help you later on in life. eg. food tech is a combination for me as I need to know how to cook as I won't be going out for dinner every day or my later on life. However you should not focus on just one either, for example if you took a subject like business academy and do not like it one bit you will not enjoy nor learn anything. However in a way you must be good at the subject as it can also help with grades and with learning but that also means you don't want to be as far ahead as that means you will be constantly bored and will of known everything you are currently learning in that particular subject.
- communicate a lot with family
- Just think about what your interested in but keep your choices open, you might change your mind
- if its something you want to do go for it and if your not sure ask don't just go for the subjects you friends are going for
- Choose either what you want to do or what interests you most.
- Find a subject that is somehow related to your hobbies
- I would tell them to pick a subject they would enjoy that may also aid them in what they want to pick for a career
- choose what subjects that can lead to what you want your career to be. But if you don't have a career that you want to be make your subjects widely spread
- follow your interests and try lots of options to find what you are good at
- think about what you want to do for a job in the future, if you don't know then think about what you're good at, if you don't think your good at much then take an array of options, one in the arts one in the biology or technology, maybe even design. make sure you be prepared to take them right through high school though.
- Pick a subject you think you will enjoy and participate in
- The subject that is most related to what you wanna be when you grow up
- Do subjects that interest you because they are easier to learn and also subject that give you a wide variety in the future for jobs.
- Just go with what you enjoy and what will Help you in the future
- I would give this advice. First you would need to choose the subject you like and is most interesting but if that doesnt seem right or doesn't seem it will work, then you should choose the subject for future work or parents suggestions.
- Choose what you like no you friends. And something that will assist you in the future
- not doing subjects this year
- To think wisely about what subjects you want to do.It would be very useful for you to pick a option you think could be your carrer in the future.
- Do what is important to you and what you think is going to be effective on your future
- Choose what you will find enjoyable and interesting but make sure this subject can lead you to a career and dont choose a subject just because your freinds are in it
- Do what you enjoy
- To go with what you love to do and that your good at and also to do what you see yourself doing when your a adult
- Do something that you will enjoy, or if you want to, try something new

- Choose the subjects you are interested in and then if you don't have all options chosen if you have some idea of what you want to be do something that can help you to get there
- Make sure you don't choose subject just what your friends are doing. Let yourself choose the subjects you think you will enjoy doing. Make sure you have had comments and input before you choose them and go to the option night!
- Choose something that you would like to have a future in and that you can take seriously. I suggest choosing 2 subjects that you will take seriously and 1 that you can have fun in and don't take seriously
- food tech is really good art is ok diji tech boring
- To go for what you enjoy.
- Year 9 is mainly to find subjects you like but by year 10 you don't have to have found what you like but do pick options you want to do and hopefully by the end of the year you find what you are looking for
- Choose subjects that appeal to you, maybe you want to do when you're older
- Choose what interests you
- choose what your interested in
- fabric , food
- choose what interests you
- choose the subjects you like and you enjoying doing for a whole year, don't choose subjects your friends are in because it may end up you not liking it at all, you could make new friends and a chance to meet new people. you are only in junior high school, you are meant to have fun in the things you do!!!! :)
- Choose subjects that you enjoy and are good at. Look at what the chosen subjects and what career/job they can lead to.
- Haven't choose a subject yet
- have fun
- make sure you look at every subject choice and think hard, also I recommend doing ones like business and food that'll probably help you in the future and then maybe a fun one or sporty one.
- Pick what your interested in
- Choose ones that appeal to you.
- Do what you are interested in
- Research the subjects your interested in before picking it.
- choose subjects that are interesting to you, not to your friends and make sure you have a range of subjects so you don't get bored.
- Choose what you enjoy, not what others are doing and choose something your interested in
- do what u want
- do the subjects that you enjoy/like
- Talk to your parents and friends but at the end of the day its your life so you need to follow your interests.
- What will you enjoy. What do you want to do in the future. What will your parents say.
- Chose a subject that could help you decide your career choice or one that can take you in the career you wanna do in future

- To choice wisely
- To pick subjects that they would enjoy, or pick subjects that could help to teach the basics of what they would want to do when they get older.
- Choose the subjects that interests you the best. Or else you'll lose your passion in learning.
- Not taking option subjects this year
- Pick what you're interested in and where you want to go in the future with your career
- Do something that you feel comfortable doing
- To choose ones that you will enjoy but will also be useful.
- whether it is a fun and educational together in one subject
- Pick what you want to improve or is interesting to you.
- To have one fun subject but still learn from it. Another subject for something you have a passion for and might want to pursue in later life. Last subject must be chosen to learn something completely new that will be hard but not too difficult for your ability.
- choose what you want to do not what one of your friends is doing. you will make new friends in your options anyway
- dont choose the same subjects as your friend, go with the ones you enjoy
- follow your dreams
- Choose something that interest you, not your friends!
- choose a range and choose some that will help you choose your future career choice.
- Follow your heart
- Choose something you are interested in so you wont find it boring. Maybe choose something that links a little to your future job.
- Choose what you enjoy and what will get you far in life
- Choose what you think you want to do when you're older. And choose a subject that could lead to work with good money.
- pick the right choice
- Go for what you enjoy and go for subjects that will help you do well on exams.
- Choose the ones that interest you and are useful for your future.
- Choose something you enjoy doing but would give you a decent income
- Chose whatever subject you want
- I would give then advice like make sure it is what you want to do and be ready for disappointment
- Well, I'd ask what they wanted to do. If the student did not know yet, i'd tell them to chosse things that they are interested in, if they knew. I'd tell them to chosse the subjects they need and then chosse some that they are interesting in, such as hobbies.
- To just give some a go and if they don't like them they can change.
- ■■■■ is when you test what you like, find your interests. ■■■■ is where you pick subjects to give you the qualifications needed for a good job, along with experience.
- choose what you love to do.
- Make your mind up
- Do what you enjoy and Like to do. This is your movie and you get to pick the way it goes and when and what you do to make it take action.
- Choose what you will do well in....., and enjoy.....

- I would say think about what you would like to become when your older and if the subject you would like to take can help you get there.
- Always try your best
- My advice to younger children is to choose the subject you are most interested in and don't worry about if your friends are in there or not. Do what you would like to do.
- find something you like and is something you are good at
- Chase your dreams
- Follow Your Goals
- Choose what you love to do. Don't go and do an option which you don't like the idea of. Also don't choose an option just because your friends are there.
- To go with the things they enjoy. Meaning that they can work to get a career they will enjoy
- Choose something that you want to do not something your friend wants to do
- Be friendly
- Choose the subject that interests you the most
- Try to find what your strengths and weaknesses are, and also identify what you enjoy doing. Try find a subject that has the best mix of strengths, weaknesses (to work on) and enjoyment.
- to try and find your favourite subject
- Choose what you want to do, not what other people want you to do.
- Choose subjects that you enjoy and maybe subjects that you want to do for a living.
- Choose a subject you are comfortable with.
- To do what interests you and is relevant to the sort of career you want to have.
- just to go for the ones that'll help you be who you wanna be and whatever interests you
- do what you like
- choose the subjects that most interest you:)
- my advice is to go to the option evenings and hope that there is more options to choose from
- Choose the subjects that you enjoy and/or chose them based on a future career you may want to do.
- Do what you want to do
- Don't base your options of how "fun" they are or workload do it based of what you think will help you reach your future work goals
- Choose subjects that you joy so you have fun during school.
- Just go for it and choose the ones you think you will enjoy
- pick what you like and what you want to improve in
- What do you want to do? And what are you good at?
- Go with what you want to do not what your friends tell you to do or your parents want you to do.
- Choose 2 Subjects that you want to work in and one technology (Less work so you can focus on the main exams and tests)
- Choose subjects that you are interested in, choosing things for the future shouldn't be your main standard since most year 8/9/10's have no idea what they're most likely going to do when they leave school/uni.
- Choose what you are interested in or what you would like to do when you are older.
- chose what you enjoy not what your friends enjoy
- Choose something that you think you're good at and something that you really enjoy.

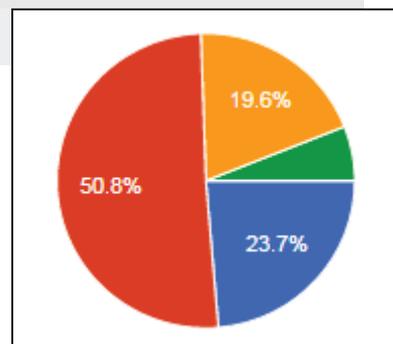
- Choose what you like to do for the first year and be more focused in the second year.
- Choose what jobs will be good in ten years time and which one of them do they like.
- Choose fast because options fill up quick?
- art , sport science
- I would tell them to do a range of things so they don't end up stuck in a collection of subject you might end up hating.
- What are your hopes for the future. What would be the needs and requirements for it.
- Not sure
- Go with the subjects you enjoy and are passionate about, or can lead up to becoming what you want be when you are older.
- pick what you like and make new friends with people who like the same things as you
- Do the ones that you like and the ones that you struggle with so you can improve.
- Go with whatever interests you, and don't mind too much of what your friends are choosing. Also try a wide range of subjects (eg. Music, Forensic and Spanish) to see what you're good at
- I didn't do options class. I'm yr 8
- Try to get a feel for what your heading towards, and if you know a certain area where you wish you're heading then chose those options. No point chosing ones because they'll look good.
- To do what you feel you will take away the most from
- Choose the subjects they are interested in first, then choose something they are good at
- Choose what you enjoy or at at good at, not what your friends are doing because you will make more friends because they have the same interest as u
- Choose what you've always wanted to do.
- to choose what you want instead of what your friends are doing
- Choose something that could help with future job. Choose what you're interested in.
- To choose subjects that you are interested in and are going to enjoy.
- Pick the ones you are most interested in.
- Choose something that they enjoy But Think about what could be used as a helpful skill in the future depending on what job you want
- To help with knowing which subjects
- What is your favorite thing to do in life
- go for something that you're interested in
- Do what you love.
- I don't know
- Do what intreats you and what your good at.
- Choose things you like not things your parents want. You spend a lot of time doing these subjects so make sure you like them. If you don't then change them.
- Choose the subjects that look best to you, and if you don't like it, change next year!
- thinke carefully
- Talk to the subject teachers about the class
- To think more about your future goals and not about the quantity of work required to do or what subjects any of your other friends might be taking next year. Your subjects need to be based on who you are and what you want to do in life, not someone else's.

- Choose which one you would like to learn or you are interested in.
- Do what you want to do not what your friend does.
- look at what you can do
- Choose what you aren interested in
- I would give an advice that they should do something that they have an interest in and they should choose something they want to do in the future, as the studies you do in option will be a stepping stone towards your willing job.
- choose ones that will help you in your future job/s
- Take options that you enjoy but that can give you the qualifications you need for future career.
- Do what you want to do, not what your parents want you to do :)
- Choose an option that your interested in and will enjoy , but will also learn things from and may lead you into your career choice .
- Choose subjects that will lead to your future
- Just do you want to do, just do what you're good at.
- If you are stuck, make sure you ask your parents as they would know what is good for you.
- chose a subject that you would enjoy
- I would just say choose subjects that interest you and do it and if you do not like it you know that, that is something you wouldn't want to do in the future.
- Choose them because you want to, not because your friends told you too or if you feel pressured by you parents. It's your education. Your life. Do what you enjoy because it's what you want to do.
- Think about something you are possibly good at or something that you would want to do as a job, but only wouldn't feel like a job because you enjoy it so much and find a subject that can help you improve your skills and get that job
- Choose subjects that interest you and don't do things just because your friends are.
- Don't know, I am struggling myself.
- Do what your good at
- chose things that your interested in, dont chose things that your friends are doing. make friends from other classes because choosing things you want to do will make the periods funner and more interesting.
- don't loaf around
- choose things that interest you. and you alone
- Choose things that you enjoy or are interested in but only if you know where they're going to take you
- Choose the subjects that you can see yourself doing in the future.

Future thinking

16. How confident do you feel about making subject choices for next year?

Very confident	75	23.7%
Confident	161	50.8%
Neither confident nor not confident	62	19.6%
Not confident	19	6%



17. How important or unimportant is it for you to consider the following when making subject choices?

Study plans at senior school years

Very important	105	33.8%
Important	157	50.5%
Neither important nor not important	47	15.1%
Not important	2	0.6%

Qualifications needed for planned career

Very important	155	49.8%
Important	125	40.2%
Neither important nor not important	29	9.3%
Not important	2	0.6%

An idea of career direction

Very important	146	47.1%
Important	131	42.3%
Neither important nor not important	32	10.3%
Not important	1	0.3%

General skills useful for the workplace

Very important	121	39%
Important	156	50.3%
Neither important nor not important	31	10%
Not important	2	0.6%

18. Which of these do you plan to do after Year 12?

Stay at school for Y13	228	69.9%
Do a training course	9	2.8%
Leave school and get a job	14	4.3%
Don't know	61	18.7%
Other	14	4.3%

19. Which of these do you plan to do after Year 13?

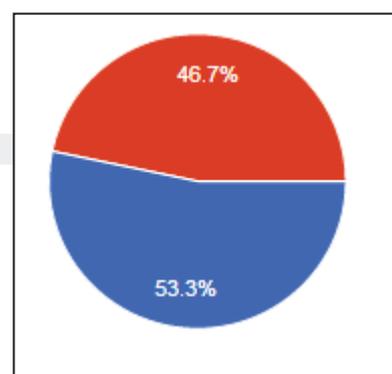
Take up a training course	24	7.4%
Find a job	63	19.4%
Go to University/ technical college	209	64.3%
Do an apprenticeship	9	2.8%
Take a year off	36	11.1%
Don't know	56	17.2%
Other	16	4.9%

20. Do you think you have enough information about NCEA courses at Year 11 and beyond?

Yes, I have enough information	36	11.2%
I have some information	86	26.8%
I have little information	60	18.7%
No, I do not have enough information	79	24.6%
I do not think this is important for me at my current year level.	60	18.7%

Career plans

21. Have you decided on what job/ career you would like to do in



the future?

Yes	171	53.3%
No	150	46.7%

22. What qualification/s do you need to be able to work at that job/ career?

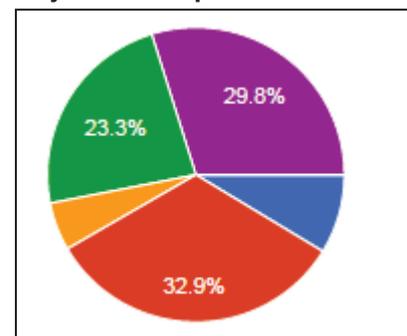
NCEA Level 2	42	13.3%
NCEA Level 3	44	13.9%
University Degree	64	20.3%
University Diploma	38	12%
Technical certificate	22	7%
Work experience	43	13.6%
None	5	1.6%
Don't know	208	65.8%
Other	19	6%

23. How did you decide what career to take?

Based on what I'm most interested in	194	65.8%
Based on my skills	132	44.7%
Based on what would be the most satisfying and worthwhile	63	21.4%
Based on the job with best career prospects	14	4.7%
Based on the highest paid job	25	8.5%
Based on who's the best employer	3	1%
I'll take almost any job I'm offered	6	2%
Based on what my family think	26	8.8%
Based on what my friends are doing	3	1%
Based on what my teachers' say I'm good at	8	2.7%
Opportunity came up	3	1%
Other	51	17.3%

24. Would your parents/ caregivers prefer you to take a different job/ career path?

Yes	28	8.7%
No	106	32.9%
They are unsure	17	5.3%
Don't know	75	23.3%
Haven't discussed it	96	29.8%

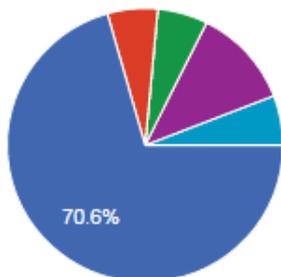


Appendix B1.3: Parent/caregiver questionnaire response summary

Parent survey Summary (18 responses)

Demographic Information

Ethnicity



NZ European 70.6%

Māori **1** 5.9%

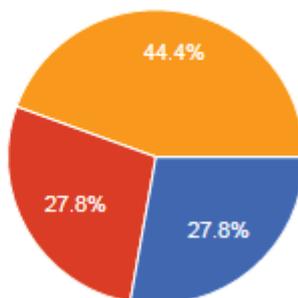
Pasifika **0** 0%

Korean **1** 5.9%

Chinese **2** 11.8%

Other **1** 5.9%

Year level of son/ daughter



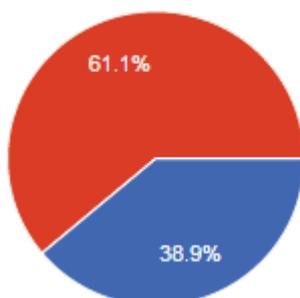
Year 8 **5** 27.8%

Year 9 **5** 27.8%

Year 10 **8** 44.4%

Gender of your child.

Gender of your child.



Male 7 38.9%

Female 11 61.1%

Your son/daughter and their school subjects

This section asks you to consider your son/ daughter's attitudes to and experiences of their school subjects.

1. How important do you think it is that your son/ daughter consider the following when making subject choices?

What they enjoy

Very important	12	66.7%
Important	6	33.3%
Neither important nor unimportant	0	0%
Not important	0	0%

What they don't enjoy		
Very important	5	27.8%
Important	8	44.4%
Neither important nor unimportant	3	16.7%
Not important	2	11.1%

What they are good at

Very important	6	33.3%
Important	8	44.4%
Neither important nor unimportant	4	22.2%
Not important	0	0%

What they are not good at		
Very important	3	16.7%
Important	6	33.3%
Neither important nor unimportant	9	50%
Not important	0	0%

Interests and talents outside of school

Very important	2	11.1%
Important	8	44.4%
Neither important nor unimportant	8	44.4%
Not important	0	0%

Are the subjects necessary for a chosen career		
Very important	7	38.9%
Important	8	44.4%
Neither important nor unimportant	3	16.7%
Not important	0	0%

Subjects necessary to get qualifications	6	33.3%
Very important		
Important	9	50%
Neither important nor unimportant	3	16.7%
Not important	0	0%

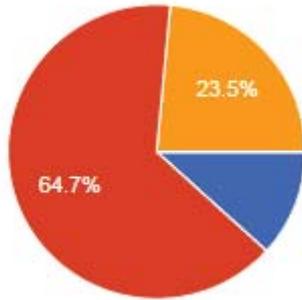
Have they chosen a range of subjects		
Very important	4	22.2%
Important	7	38.9%
Neither important nor unimportant	7	38.9%
Not important	0	0%

Difficulty level of subject

Very important	2	11.1%
Important	8	44.4%
Neither important nor unimportant	6	33.3%
Not important	2	11.1%

Work load in subject		
Very important	2	11.1%
Important	8	44.4%
Neither important nor unimportant	6	33.3%
Not important	2	11.1%

2. How well do the school subjects offered match your son/ daughter's interests?



Extremely well	2	11.8%
Quite well	11	64.7%
Well	4	23.5%
Not well at all	0	0%

Influences on subject choices
 This section asks you to consider influences and their impact on your son/ daughter's subject choices.

3. How important do you think the following influences are on your son/ daughter when making subject choices?]

Family

Very important	3	16.7%
Important	11	61.1%
Neither important nor not important	4	22.2%
Not important	0	0%
Don't know	0	0%

Grades/ exam results

Very important	6	33.3%
Important	10	55.6%
Neither important nor not important	2	11.1%
Not important	0	0%
Don't know	0	0%

Community leaders

Very important	1	5.6%
Important	1	5.6%
Neither important nor not important	9	50%
Not important	6	33.3%
Don't know	1	5.6%

Media

Very important	1	5.6%
Important	4	22.2%
Neither important nor not important	6	33.3%
Not important	5	27.8%
Don't know	2	11.1%

Friends [

Very important	1	5.6%
Important	10	55.6%
Neither important nor not important	7	38.9%
Not important	0	0%
Don't know	0	0%

Teachers

Very important	6	33.3%
Important	8	44.4%
Neither important nor not important	4	22.2%
Not important	0	0%
Don't know	0	0%

Career plans

Very important	4	22.2%
Important	10	55.6%
Neither important nor not important	4	22.2%
Not important	0	0%
Don't know	0	0%

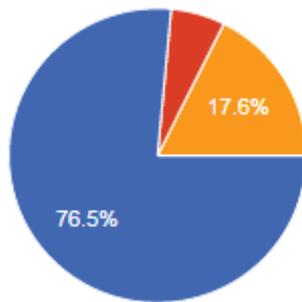
Interests

Very important	4	22.2%
Important	14	77.8%
Neither important nor not important	0	0%
Not important	0	0%
Don't know	0	0%

Leads on to future studies

Very important	6	33.3%
Important	9	50%
Neither important nor not important	3	16.7%
Not important	0	0%
Don't know	0	0%

4. Did you agree with your son/ daughter's subject choices?



Yes	13	76.5%
No	1	5.9%
Did not mind what they chose	3	17.6%

Why/ Why not?

- My son was involved with choosing these
- My daughters third choice option was only because she couldn't get into the Drama option due to conflicting schedules. She has asked to choose another, which I didn't think was a good choice. She was put on the spot and asked to pick another subject then and there. Would have been appreciated if she had of had a night to discuss with us as parents before making the decision.
- Going into year 9 as long as they are interested and wanting to learn. Getting balance is important.
- They are appropriate
- As long as she is happy with her choices and can give 100%
- It's year 10 and with the junior/senior model what she has chosen in year 9/10 doesn't effect her ability to chose subjects at year 11. I may have felt differently about subject choices if they had more of an impact on what she could pick at year 11. I did think it was important to try as many different options in year 9/10 as possible as a 'taste' of what was available.
- A mix of what she enjoys & core subjects which ensures she'll enjoy some (hopefully all) of her lessons
- The subjects my son chose are his strengths, interests and from the available choices, were the ones he enjoyed.
- Hasn't chosen yet
- I think Whatever she like it, She will success.
- My son is in year 8 and has not yet chosen his options

Information on subject choices

This section asks you to comment on sources of information you may use when your son/daughter chooses subjects.

5. Have you used any of the following sources to find out more information about your son/daughter's subject choices? If so indicate how useful you found them

Course information booklets

Very useful	4	23.5%
Useful	10	58.8%
Neither useful nor not useful	0	0%
Not useful	0	0%
Have not used this resource	3	17.6%

School option evenings

Very useful	3	17.6%
Useful	11	64.7%
Neither useful nor not useful	1	5.9%
Not useful	1	5.9%
Have not used this resource	1	5.9%

Subject teachers

Very useful	2	11.8%
Useful	12	70.6%
Neither useful nor not useful	2	11.8%
Not useful	0	0%
Have not used this resource	1	5.9%

Whanau teachers

Very useful	1	5.9%
Useful	3	17.6%
Neither useful nor not useful	5	29.4%
Not useful	4	23.5%
Have not used this resource	4	23.5%

Head of Learning Area

Very useful	2	11.8%
Useful	9	52.9%
Neither useful nor not useful	4	23.5%
Not useful	0	0%
Have not used this resource	2	11.8%

School careers teacher

Very useful	2	11.8%
Useful	6	35.3%
Neither useful nor not useful	3	17.6%
Not useful	1	5.9%
Have not used this resource	5	29.4%

Career expos

Very useful	1	5.9%
Useful	8	47.1%
Neither useful nor not useful	3	17.6%
Not useful	0	0%
Have not used this resource	5	29.4%

Career websites

Very useful	1	5.9%
Useful	8	47.1%
Neither useful nor not useful	3	17.6%
Not useful	0	0%
Have not used this resource	5	29.4%

Friends

Very useful	0	0%
Useful	5	29.4%
Neither useful nor not useful	7	41.2%
Not useful	2	11.8%
Have not used this resource	3	17.6%

Media

Very useful	0	0%
Useful	2	11.8%
Neither useful nor not useful	6	35.3%
Not useful	3	17.6%
Have not used this resource	6	35.3%

NCEA information sources

Very Useful	1	5.9%
Useful	6	35.3%
Neither useful nor not useful	6	35.3%
Not useful	0	0%
Have not used this resource	4	23.5%

Other (Please specify)

My son hasn't chosen his subjects yet, I think he needs to meet with the school guidance teacher who will advise him on the subjects which would help him best.

My son is in year 8 and we have not yet talked about options nor heard anything from the school regarding this. However there is an "options information evening" coming up that we will attend to find out more.

[6. Who would you suggest your son/ daughter go to for advice to help them make subject choices?]

Family members

Yes	13	72.2%
No	0	0%
Maybe	5	27.8%

Whanau teacher

Yes	7	41.2%
No	5	29.4%
Maybe	5	29.4%

Subject teacher

Yes	13	72.2%
No	2	11.1%
Maybe	3	16.7%

Head of Learning Area

Yes	12	66.7%
No	2	11.1%
Maybe	4	22.2%

Careers teacher

Yes	11	61.1%
No	1	5.6%
Maybe	6	33.3%

Friends [

Yes	2	11.1%
No	9	50%
Maybe	7	38.9%

Students in higher classes already doing that subject

Yes	8	44.4%
No	3	16.7%
Maybe	7	38.9%

Next year's teacher

Yes	8	44.4%
No	3	16.7%
Maybe	7	38.9%

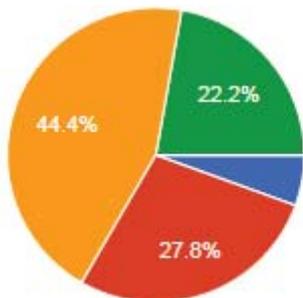
Don't know

Yes	0	0%
No	2	50%
Maybe	2	50%

Other (please specify)

Explain don't know as a person to go talk to ???

7. Do you feel you have enough information to advise your son/ daughter on subject choices for next year?

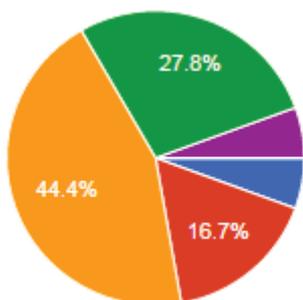


Yes, I have all the information needed	1	5.6%
I have some information	5	27.8%
I have little information	8	44.4%
No, I do not have enough information	4	22.2%

What other information would you like to have?

- My son may be moving to [redacted] next year so will see what the subjects are there. I/we found enough information about the subjects he took in year 9 & 10 to be sufficient enough to decide on what he wanted to take.
- I don't yet have any information. My son is in year 8 and we have not started discussing options yet. We will attend an information evening soon.
- A lot What support is to be in place for learning difficulty students
- I would like to know more about NCEA and the pathways to work or to further education. What credits mean and what numeracy/literacy credits, endorsement etc mean.
- I would like to have more contents of the option subjects.
- Another options evening, which I am sure is coming up in Term 4

8. Do you think you have enough information about NCEA courses at Year 11 and beyond to advise your son/ daughter?



Yes, I have enough information	1	5.6%
I have some information	3	16.7%
I have little information	8	44.4%
No, I do not have enough information	5	27.8%
I do not think this is important to my son/ daughter at their current year level	1	5.6%

9. How helpful do you think the following would be in assisting your son/ daughter to make subject choices?]

More subject choices

Very helpful	3	16.7%
Helpful	9	50%
Neither helpful nor unhelpful	3	16.7%
Not helpful	2	11.1%
Don't know	1	5.6%

Fewer compulsory subjects

Very helpful	0	0%
Helpful	1	5.9%
Neither helpful nor unhelpful	5	29.4%
Not helpful	10	58.8%
Don't know	1	5.9%

Work experience opportunities

Very helpful	7	38.9%
Helpful	9	50%
Neither helpful nor unhelpful	0	0%
Not helpful	2	11.1%
Don't know	0	0%

Greater student input into subjects offered

Very helpful	4	22.2%
Helpful	2	11.1%
Neither helpful nor unhelpful	9	50%
Not helpful	2	11.1%
Don't know	1	5.6%

Career

Very helpful	9	52.9%
Helpful	7	41.2%
Neither helpful nor unhelpful	1	5.9%
Not helpful	0	0%
Don't know	0	0%

Information on entry requirements for University/ Technical Training courses and apprenticeships**Fewer subject choices**

Very helpful	0	0%
Helpful	0	0%
Neither helpful nor unhelpful	8	44.4%
Not helpful	9	50%
Don't know	1	5.6%

Integration of subjects

Very helpful	1	5.6%
Helpful	4	22.2%
Neither helpful nor unhelpful	6	33.3%
Not helpful	5	27.8%
Don't know	2	11.1%

Career guidance advice

Very helpful	8	44.4%
Helpful	8	44.4%
Neither helpful nor unhelpful	1	5.6%
Not helpful	1	5.6%
Don't know	0	0%

Information on the qualifications the subject can lead to

Very helpful	8	47.1%
Helpful	8	47.1%
Neither helpful nor unhelpful	1	5.9%
Not helpful	0	0%
Don't know	0	0%

Information on the jobs the subject can lead to

Very helpful	9	50%
Helpful	9	50%
Neither helpful nor unhelpful	0	0%
Not helpful	0	0%
Don't know	0	0%

Very helpful	9	50%
Helpful	8	44.4%
Neither helpful nor unhelpful	1	5.6%
Not helpful	0	0%
Don't know	0	0%

Information on course content			
Very helpful	9	50%	
Helpful	9	50%	
Neither helpful nor unhelpful	0	0%	
Not helpful	0	0%	
Don't know	0	0%	

Workload requirement information

Very helpful	9	50%
Helpful	7	38.9%
Neither helpful nor unhelpful	2	11.1%
Not helpful	0	0%
Don't know	0	0%

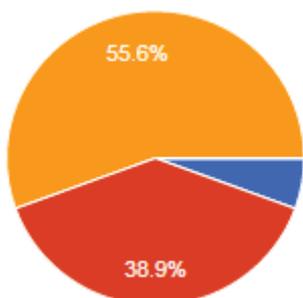
10. What advice would you give your son/ daughter on choosing subjects?

- Keep it general as possible
- What his interests are, the enjoyment factor, any strengths - with a focus on what type or sort of job he would like to end up doing. Does he want to further his education by going to Tech or University or would he think about doing a trade, hands on and learning on the job with skills etc - apprenticeship or maybe having a look via work experience for a day to see what really happens. Will he be taking the right subjects towards what he wants to do or are they are waste of time?
- I really don't know yet. Have not got any information, he is my oldest child so this will be the first time going through this.
- That would depend on career choice, as my daughter doesn't really know I am advising her to take a range of basic subjects.
- Choose what you are going to make a living out off first then interest after if you cant combine them both
- Keep options open by continuing to take English, maths, science.
- Passion is important. Changing subjects is OK.
- At this stage, I would tell my daughter choose subject she interests in or some subjects relate to her interest.
- Choose subjects which will help you to get into university to do the course you want to study.
- This goes beyond year 9 and to all year levels - keep your options open. Always have a maths science and english then choose two things that make you happy & that you are good at. You can pick up the others at university- ensure you choose university approved subjects.
- I recommend him/her to choose what he/she wants to learn or experience.
- They have to enjoy the subjects that they take. Also, do these subjects lead on later to a path that leads to an area of interest, which could help their future.

Future Planning

This section asks you to comment on your views on the future plans of your son/ daughter

11. How confident do you feel about advising your son/ daughter on subject choices for next year?



Very confident	1
Confident	7
Neither confident nor not confident	10
Not confident	0

12. How important do you think it is for your son/ daughter to consider the following when making subject choices?

Study plans at senior school years

Very important	4	22.2%
Important	14	77.8%
Neither important nor unimportant	0	0%
Unimportant	0	0%
Don't know	0	0%

Qualifications needed for planned career

Very important	12	66.7%
Important	1	5.6%
Neither important nor unimportant	5	27.8%
Unimportant	0	0%
Don't know	0	0%

An idea of career direction

Very important	8	44.4%
Important	6	33.3%
Neither important nor unimportant	4	22.2%
Unimportant	0	0%
Don't know	0	0%

Skills and attributes needed for planned career

Very important	6	33.3%
Important	9	50%
Neither important nor unimportant	3	16.7%
Unimportant	0	0%
Don't know	0	0%

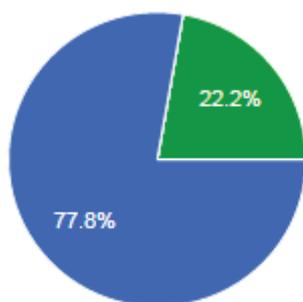
General skills useful for the workplace

Very important	6	33.3%
Important	12	66.7%
Neither important nor unimportant	0	0%
Unimportant	0	0%
Don't know	0	0%

Personality/ Personal attributes

Very important	9	50%
Important	9	50%
Neither important nor unimportant	0	0%
Unimportant	0	0%
Don't know	0	0%

13. Which of these does your son/ daughter plan to do after Year 12?



Stay at school for Year 13	14	77.8%
Leave school and do a training course	0	0%
Find a job	0	0%
Don't know	4	22.2%

Other (please specify)

- I think at year 8 he is a bit young for deciding his career path. What he may think he wants to be at age 12 or 13 is quite possibly not what he will want to be when he is 18.

14. Which of these does your son/ daughter plan to do after Year 13?

Do a training course	1	5.6%
Go to University/ Technical College	13	72.2%
Do an apprenticeship	2	11.1%
Find a job	2	11.1%
Take a year off	0	0%
Don't know	5	27.8%

Other (please specify)

My son is year 8. Too soon for this.

Career directions

15. Has your son/ daughter decided on what job/ career they would like to do in the future?

Yes	5	27.8%
No	11	61.1%
Don't know	2	11.1%

16. What qualification will your son/ daughter need to be able to work at that job/ career?

NCEA Level 2	0	0%
NCEA Level 3	0	0%
University Degree	8	50%

Tertiary Institution Diploma/ Certificate	1	6.3%
Work experience	0	0%
Don't know	6	37.5%
None	1	6.3%

Other (please specify)

She has no idea, at the moment what she wants to do.

17. How important is it for your son/ daughter to consider the following when thinking about a job/ career?

What they are most interested in

Very important	13	72.2%
Important	5	27.8%
Neither important nor unimportant	0	0%
Unimportant	0	0%
Don't know	0	0%

Skills they have		
Very important	9	50%
Important	9	50%
Neither important nor unimportant	0	0%
Unimportant	0	0%
Don't know	0	0%

What would be the most satisfying and worthwhile

Very important	8	44.4%
Important	9	50%
Neither important nor unimportant	1	5.6%
Unimportant	0	0%
Don't know	0	0%

The job with best career prospects		
Very important	3	16.7%
Important	7	38.9%
Neither important nor unimportant	7	38.9%
Unimportant	1	5.6%
Don't know	0	0%

The highest paid job

Very important	0	0%
Important	5	27.8%
Neither important nor unimportant	9	50%
Unimportant	4	22.2%
Don't know	0	0%

Who's the best employer		
Very important	1	5.6%
Important	6	33.3%
Neither important nor unimportant	9	50%
Unimportant	2	11.1%
Don't know	0	0%

Take almost any job they're offered

Very important	0	0%
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What family think		
Very important	0	0%
Important	4	22.2%
Neither important nor unimportant	8	44.4%
Unimportant	6	33.3%
Don't know	0	0%

Important	1	5.6%
Neither important nor unimportant	6	33.3%
Unimportant	11	61.1%
Don't know	0	0%

What their friends are doing

Very important	0	0%
Important	0	0%
Neither important nor unimportant	11	61.1%
Unimportant	7	38.9%
Don't know	0	0%

What their teachers' say they are good at

Very important	0	0%
Important	9	50%
Neither important nor unimportant	9	50%
Unimportant	0	0%
Don't know	0	0%

Don't know

Very important	0	0%
Important	0	0%
Neither important nor unimportant	2	40%
Unimportant	2	40%
Don't know	1	20%

Other (please specify)

I think doing a course that leads to a particular career is important but must be balanced with learning transferable skills. This will enable flexibility in a career which is important for life as you never know where or what life will bring you.

18. Would you prefer you son/ daughter to take a different job/ career path from the one they are planning?

Yes	0	0%
No	9	52.9%
Unsure	3	17.6%
Don't know	0	0%
Haven't discussed it	5	29.4%

Thank you for sharing your views and giving your time to complete this questionnaire.

Please feel free to add further comments on the questionnaire topics.

- I do think that the school needs to do a bit more for the year 10's. They did have a careers day but there was not enough variety. For example, there were no sport options (eg physio),

no health options except for optometrist (eg nutritionist, dietician, etc). As this is the area my daughter is most interested in, it was really no help.

- I really don't feel this questionnaire is very relevant to my 12 year old. I think this is a great questionnaire but for kids a couple of years older than my child.
- Hopefully School can managing them to their right choice.

Appendix B1.4: Staff questionnaire response summary

Staff survey Summary - 18 responses

Demographic Information

Role in School

Classroom teacher	8	44.4%
Head of Learning Area	8	44.4%
Subject Specialist	8	44.4%
Whanau Leader	2	11.1%
Academic Dean	0	0%
Senior Management	2	11.1%
Guidance	0	0%
Other	1	5.6%

Ethnicity

New Zealand European	15	88.2%
Maori	1	5.9%
Pasifika	0	0%
Korean	0	0%
Chinese	0	0%
Other	2	11.8%

Year levels taught in the last 12 months

Year 7	7	38.9%
Year 8	8	44.4%
Year 9	14	77.8%
Year 10	16	88.9%
Years 11-13	0	0%
Not applicable	1	5.6%

Students and their school subjects

1. How important are the following for students to consider when making subject choices?]

What they enjoy [

Very important	13	72.2%
Important	5	27.8%
Neither important nor unimportant	0	0%
Not important	0	0%

What they don't enjoy

Very important	9	52.9%
Important	5	29.4%
Neither important nor unimportant	3	17.6%
Not important	0	0%

What they are good at

Very important	7	38.9%
Important	7	38.9%
Neither important nor unimportant	4	22.2%
Not important	0	0%

What they are not good at

Very important	6	35.3%
Important	5	29.4%
Neither important nor unimportant	6	35.3%
Not important	0	0%

Interests and talents outside of school

Very important	4	23.5%
Important	10	58.8%

Are the subjects necessary for a chosen career

Very important	7	38.9%
Important	3	16.7%
Neither important nor unimportant	6	33.3%
Not important	2	11.1%

Neither important nor unimportant	3	17.6%
Not important	0	0%

Subjects necessary to get qualifications

Very important	5	27.8%
Important	7	38.9%
Neither important nor unimportant	5	27.8%
Not important	1	5.6%

Subjects useful to get a job			
Very important	6	33.3%	
Important	6	33.3%	
Neither important nor unimportant	6	33.3%	
Not important	0	0%	

Have they chosen a range of subjects

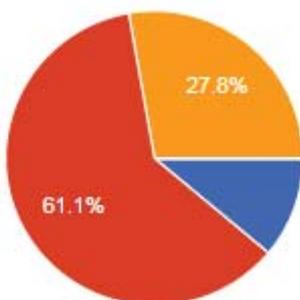
Very important	3	16.7%
Important	11	61.1%
Neither important nor unimportant	4	22.2%
Not important	0	0%

Difficulty level of subject			
Very important	2	11.1%	
Important	9	50%	
Neither important nor unimportant	6	33.3%	
Not important	1	5.6%	

Work load in subject

Very important	0	0%
Important	11	61.1%
Neither important nor unimportant	5	27.8%
Not important	2	11.1%

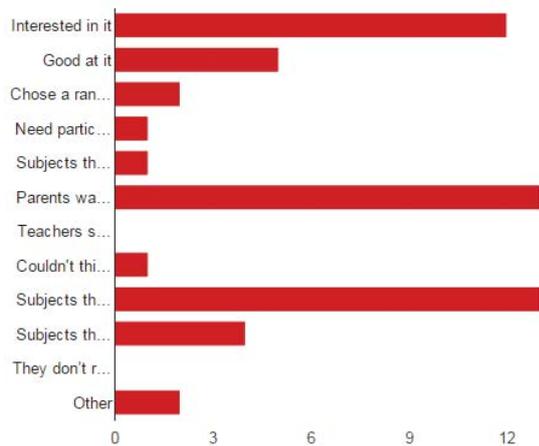
2. How well do you think subjects offered match students' interests?



Very well	2	11.1%
Well	11	61.1%
Neither well nor not well	5	27.8%
Not well	0	0%
Don't know	0	0%

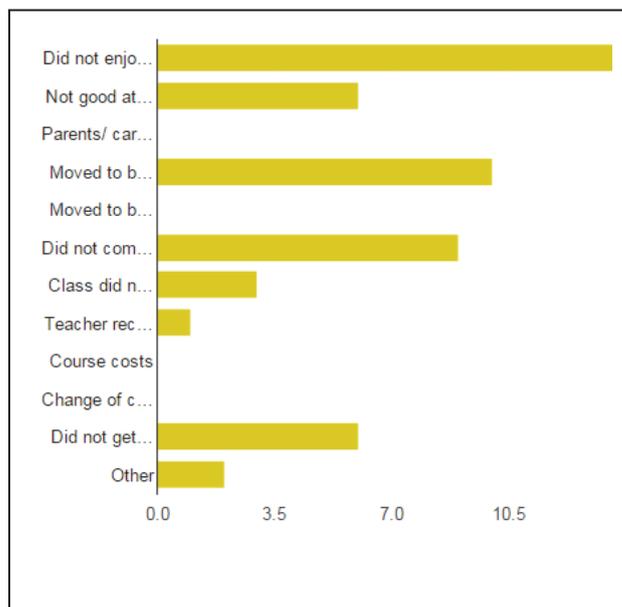
Choosing Subjects

3. In your experience, which are the common reasons students choose a subject?



4. In your experience, what are the main reasons students change option subjects during a year?

Did not enjoy subject	14	77.8%
Not good at the subject	6	33.3%
Parents/ caregivers wanted them to change	0	0%
Moved to be with friends	10	55.6%
Moved to be away from friends	0	0%
Did not complete set work	9	50%
Class did not run because of small numbers	3	16.7%
Teacher recommendation	1	5.6%
Course costs	0	0%
Change of career direction	0	0%
Did not get on with teacher	6	33.3%
Other	2	11.1%



5. How important do you think the following are when assisting students to choose or assigning students to option subjects.

Student request

Very important	12	66.7%
Important	6	33.3%
Neither important nor unimportant	0	0%
Not important	0	0%
Don't know	0	0%

Parent request

Very important	5	27.8%
Important	8	44.4%
Neither important nor unimportant	5	27.8%
Not important	0	0%
Don't know	0	0%

Teacher request

Very important	1	5.6%
Important	13	72.2%
Neither important nor unimportant	3	16.7%
Not important	1	5.6%
Don't know	0	0%

Timetable

Very important	1	5.6%
Important	5	27.8%
Neither important nor unimportant	5	27.8%
Not important	6	33.3%
Don't know	1	5.6%

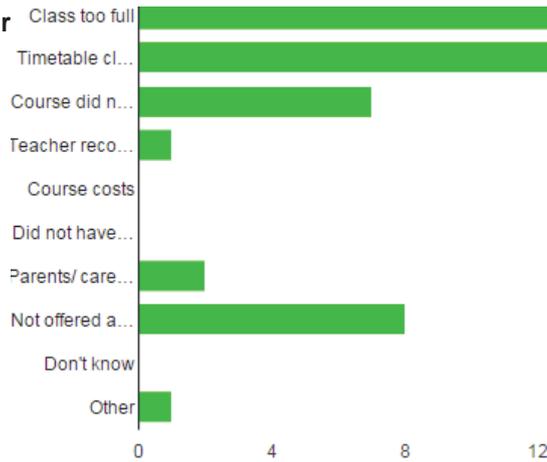
Student academic record in the subject/ related subject			
Very important	5	27.8%	
Important	10	55.6%	
Neither important nor unimportant	1	5.6%	
Not important	2	11.1%	
Don't know	0	0%	

Staffing			
Very important	2	11.1%	
Important	8	44.4%	
Neither important nor unimportant	4	22.2%	
Not important	2	11.1%	
Don't know	2	11.1%	

What other factors might you consider?

- The number of students already doing that subject (especially Tech subjects).
- Whether the subject is offered by [redacted] and what they cover in their curriculum (how well does it 'marry' with our curriculum)
- Prior knowledge of the student's interests and possible future pathways.
- I don't think a full timetable of Option subjects is relevant for students who have little or no ability to read and write (either for ESOL or ability related). I think more time spent learning to read and write would benefit in the long run rather than learning specialised subject information.
- Career options for those who know what they want to do.
- Learners have missed out on their preferred Option subject choice due to numbers being too high, and some have had to reselect without being able to discuss with family members. The reason Option Choices are made relatively early prior to following school yes is so learners get their first and most desired choices, staffing should then be selected/allocated to meet the needs of our learners, NOT the other way round!

6. In your not get into a chosen option



Class too full	16	88.9%
Timetable clash	14	77.8%
Course did not run due to low numbers	7	38.9%
Teacher recommendation	1	5.6%
Course costs	0	0%
Did not have needed skills	0	0%
Parents/ caregivers did not agree	2	11.1%
Not offered at the school	8	44.4%
Don't know	0	0%
Other	1	5.6%

subject?

Influences on subject choices

7. How important do you think the following influences are when students make subject choices?

Family

Very important	4	22.2%
Important	9	50%
Neither important nor unimportant	5	27.8%
Not important	0	0%
Don't know	0	0%

Friends

Very important	8	44.4%
Important	5	27.8%
Neither important nor unimportant	4	22.2%
Not important	1	5.6%
Don't know	0	0%

Grades/ exam results

Very important	3	17.6%
Important	10	58.8%
Neither important nor unimportant	4	23.5%
Not important	0	0%
Don't know	0	0%

Teachers

Very important	4	22.2%
Important	9	50%
Neither important nor unimportant	5	27.8%
Not important	0	0%
Don't know	0	0%

Community leader

Very important	0	0%
Important	2	11.1%
Neither important nor unimportant	8	44.4%
Not important	5	27.8%
Don't know	3	16.7%

Career plans

Very important	2	11.1%
Important	8	44.4%
Neither important nor unimportant	7	38.9%
Not important	1	5.6%
Don't know	0	0%

Yes	9	52.9%
Maybe	8	47.1%
No	0	0%

Career's teacher

Yes	8	47.1%
Maybe	7	41.2%
No	2	11.8%

Friends

Yes	1	5.9%
Maybe	6	35.3%
No	10	58.8%

Students in higher classes

Yes	8	47.1%
Maybe	7	41.2%
No	2	11.8%

Community leaders

Yes	1	5.9%
Maybe	10	58.8%
No	6	35.3%

Next year's school staff

Yes	2	11.8%
Maybe	8	47.1%
No	7	41.2%

Potential employers

Yes	5	29.4%
Maybe	8	47.1%
No	4	23.5%

University recruitment advisors

Yes	5	29.4%
Maybe	9	52.9%
No	3	17.6%

Sources of Information

10. Have you used any of the following sources to find information on subject choices?

Course information booklets

Very useful	9	50%
Useful	8	44.4%
Neither useful nor not useful	0	0%
Not useful	0	0%
Have not used this source	1	5.6%

School option evenings

Very useful	10	55.6%
Useful	6	33.3%
Neither useful nor not useful	1	5.6%
Not useful	0	0%
Have not used this source	1	5.6%

Subject teachers

Very useful	8	47.1%
Useful	6	35.3%
Neither useful nor not useful	3	17.6%
Not useful	0	0%
Have not used this source	0	0%

Whanau teachers

Very useful	0	0%
Useful	3	17.6%
Neither useful nor not useful	6	35.3%
Not useful	6	35.3%
Have not used this source	2	11.8%

HOLA

Very useful	5	27.8%
Useful	11	61.1%
Neither useful nor not useful	2	11.1%
Not useful	0	0%
Have not used this source	0	0%

School careers teacher

Very useful	1	5.9%
Useful	6	35.3%
Neither useful nor not useful	6	35.3%
Not useful	1	5.9%
Have not used this source	3	17.6%

Career expos

Very useful	3	17.6%
Useful	5	29.4%
Neither useful nor not useful	3	17.6%
Not useful	1	5.9%
Have not used this source	5	29.4%

Websites

Very useful	7	41.2%
Useful	5	29.4%
Neither useful nor not useful	2	11.8%
Not useful	1	5.9%
Have not used this source	2	11.8%

Parents

Very useful	0	0%
Useful	8	47.1%
Neither useful nor not useful	6	35.3%
Not useful	0	0%
Have not used this source	3	17.6%

Friends

Very useful	0	0%
Useful	2	11.8%
Neither useful nor not useful	11	64.7%
Not useful	2	11.8%
Have not used this source	2	11.8%

Media

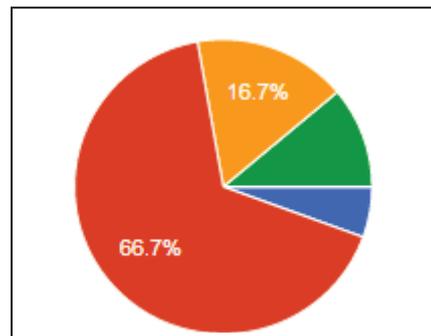
Very useful	0	0%
Useful	6	35.3%
Neither useful nor not useful	8	47.1%
Not useful	1	5.9%
Have not used this source	2	11.8%

Tertiary institution information services

Very useful	5	29.4%
Useful	6	35.3%
Neither useful nor not useful	3	17.6%
Not useful	1	5.9%
Have not used this source	2	11.8%

11. Do you feel you have enough information on career pathways to advise your students on subject choices?

Yes, I have all the information needed	1	5.6%
I have some information	12	66.7%
I have little information	3	16.7%
No, I do not have enough information	2	11.1%



What other information would you like to have?

- Innovations at present that are likely to inform future career opportunities.
- A more robust Careers Department at [redacted] would be wonderful! I would like to see a classroom permanently set up with guest speakers/young members of the community/parents/business entrepreneurs coming in often, constant innovative information available for our learners.
- I must say I have not had much experience in advising option choices. Neither have I attended an option evening. I assume this is where the majority of information is transferred to students and their families. So I have had little information, not because it is not out there... Maybe if students could indicate through a survey which they are considering and then advice and guidance is given to them before final choices are submitted?

- Pathways for subjects which are offered in our school.

12. How helpful do you think the following would be in assisting students to make subject choices?

More subject choices

Very helpful	2	11.8%
Helpful	4	23.5%
Neither helpful nor not helpful	8	47.1%
Not helpful	3	17.6%
Don't know	0	0%

Fewer subject choices

Very helpful	0	0%
Helpful	3	16.7%
Neither helpful nor not helpful	12	66.7%
Not helpful	3	16.7%
Don't know	0	0%

Fewer compulsory subjects

Very helpful	1	5.6%
Helpful	4	22.2%
Neither helpful nor not helpful	7	38.9%
Not helpful	6	33.3%
Don't know	0	0%

Integration of subjects

Very helpful	2	11.1%
Helpful	4	22.2%
Neither helpful nor not helpful	7	38.9%
Not helpful	4	22.2%
Don't know	1	5.6%

Work experience opportunities

Very helpful	3	16.7%
Helpful	13	72.2%
Neither helpful nor not helpful	0	0%
Not helpful	2	11.1%
Don't know	0	0%

Career guidance advice

Very helpful	5	27.8%
Helpful	9	50%
Neither helpful nor not helpful	2	11.1%
Not helpful	2	11.1%
Don't know	0	0%

Greater student input into subjects offered

Very helpful	6	33.3%
Helpful	7	38.9%
Neither helpful nor not helpful	4	22.2%
Not helpful	1	5.6%
Don't know	0	0%

Information on the qualifications the subject can lead

Very helpful	11	61.1%
Helpful	4	22.2%
Neither helpful nor not helpful	2	11.1%
Not helpful	1	5.6%
Don't know	0	0%

Career expos

Very helpful	5	27.8%
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Helpful	9	50%
Neither helpful nor not helpful	2	11.1%
Not helpful	2	11.1%
Don't know	0	0%

Information on the jobs the subject can lead to

Very helpful	10	58.8%
Helpful	4	23.5%
Neither helpful nor not helpful	2	11.8%
Not helpful	1	5.9%
Don't know	0	0%

**Information on entry requirements for University/
Technical Training courses and apprenticeships**

Very helpful	11	61.1%
Helpful	5	27.8%
Neither helpful nor not helpful	2	11.1%
Not helpful	0	0%
Don't know	0	0%

Information on course content

Very helpful	11	61.1%
Helpful	6	33.3%
Neither helpful nor not helpful	1	5.6%
Not helpful	0	0%
Don't know	0	0%

Information on workload requirements

Very helpful	10	55.6%
Helpful	4	22.2%
Neither helpful nor not helpful	1	5.6%
Not helpful	3	16.7%
Don't know	0	0%

Other (Please specify)

See previous Q for ways to keep all of this readily available when our learners need it.
Conferencing with teachers

13. What advice would you a student who is trying to choose subjects?

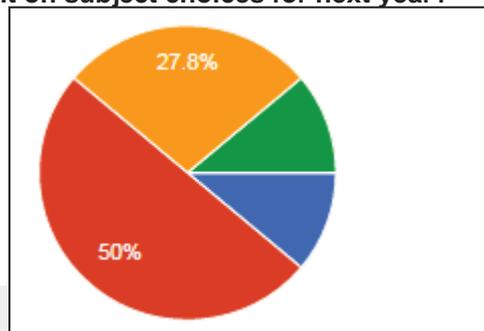
- I avoid giving advice to students at this school as there is little cohesiveness in information and they are given far too much incorrect information.
- Do as many different subjects as you can in Y9 & 10 to have a better idea of what appeals to you. This may help you decide what you would like to do in the future.
- To think about what they would like to do in the future. Which subjects are leading towards this at University. To look at their strengths, weaknesses and what they enjoy. To use the Internet to investigate what they are suited to and check the subject is leading towards the desired career

path.. <http://www.careers.govt.nz/jobs/> - gives clear guidelines to the subjects and qualifications needed for most jobs.

- Do your homework. If you do not have a passion and goal for a particular career then keep your options broad.
- Look into the pathway of the subject and what options are available at their next school, as well as what they need to get into the courses for that career.
- That years 9 and 10 are years to find out what they enjoy and or are good at, make the most of them and take a wide range
- Think about what they want to do, what they are good at. How option choices will impact future educational pathways.
- Start with your passions and add subjects that will help you be better at whatever you hope to do.
- To first think about a future career or passions - look at timeframes after school - activities etc
- To try a new subject, what feels right for them and something they have an interest in.
- Choose subjects that you are interested in. Don't worry about what your friends are choosing - their interests are different to yours. Speak to your parents at all stages of the process. Talk to your teachers about what subjects might be the best option for you.
- Look at the benefits that the subject offers in the wider aspect e.g. careers, community, communication etc
- Follow their interests and passions and consider which subjects will give them experiences that link to necessary life skills both now, senior school years and after school has finished. Important to consider recreational subjects as this is important in a busy working life as well as academic success.
- Choose what they like and what they're good at. Choices can change in the future if they need to.

14. How confident do you feel about advising a student on subject choices for next year?

Very confident	2	11.1%
Confident	9	50%
Neither confident nor unconfident	5	27.8%
Not confident	2	11.1%



Future planning

15. How important do you think it is for students to consider the following when making subject choices?

Study plans at senior school years

Very important	5	27.8%
Important	10	55.6%
Neither important nor unimportant	3	16.7%
Not important	0	0%
Don't know	0	0%

Qualifications needed for planned career

Very important	7	38.9%
Important	7	38.9%
Neither important nor unimportant	3	16.7%
Not important	1	5.6%
Don't know	0	0%

An idea of career direction

Very important	4	22.2%
Important	8	44.4%
Neither important nor unimportant	4	22.2%
Not important	2	11.1%
Don't know	0	0%

General skills useful for the workplace

Very important	7	38.9%
Important	9	50%
Neither important nor unimportant	1	5.6%
Not important	1	5.6%
Don't know	0	0%

Skills and attributes needed for planned career

Very important	3	16.7%
Important	10	55.6%
Neither important nor unimportant	4	22.2%
Not important	1	5.6%
Don't know	0	0%

Personality/ personal attributes

Very important	7	38.9%
Important	8	44.4%
Neither important nor unimportant	2	11.1%
Not important	1	5.6%
Don't know	0	0%

16. How important do you think it is for students to consider the following when thinking about a job/ career?

What they are most interested in

Very important	12	66.7%
Important	5	27.8%
Neither important nor not important	1	5.6%
Not important	0	0%
Don't know	0	0%

Skills they have

Very important	5	27.8%
Important	12	66.7%
Neither important nor not important	1	5.6%
Not important	0	0%
Don't know	0	0%

What would be the most satisfying and worthwhile

Very important	12	66.7%
Important	6	33.3%
Neither important nor not important	0	0%
Not important	0	0%
Don't know	0	0%

The job with best career prospects

Very important	2	11.1%
Important	11	61.1%
Neither important nor not important	4	22.2%
Not important	1	5.6%
Don't know	0	0%

What family think

Very important	0	0%
Important	7	38.9%
Neither important nor not important	9	50%
Not important	2	11.1%
Don't know	0	0%

What their friends are doing

Very important	0	0%
Important	1	5.6%
Neither important nor not important	7	38.9%
Not important	10	55.6%
Don't know	0	0%

What their teachers' say they are good at

Very important	1	5.6%
Important	8	44.4%
Neither important nor not important	8	44.4%
Not important	1	5.6%
Don't know	0	0%

Don't know			
Very important	0	0%	
Important	1	10%	
Neither important nor not important	2	20%	
Not important	0	0%	
Don't know	7	70%	

Other (Please specify)

Thank you for sharing your views and giving your time to complete this survey.

- Being a middle school with very little 'bridging' between us and the students' destinations, careers advice and subject choice info can have little practical worth. We would be better to keep it broad..I favour a three column approach (one from the languages, one from the arts, one from technology)
- Teachers definitely need more PD to guide students in the right direction as it involves their whole future.
- I think students changing subjects is an area to be looked at as well. It is important that this can still occur but it would be good to record and track patterns with in this.
- Occupations are going to be very different in the future and current students will probably experience more changes than we can currently imagine. Focusing on one path would be detrimental to their future flexibility. Gaining confidence in their own ability through choosing subjects they are good at and enjoy will fuel this confidence. All subjects teach Key Competencies which are the real transferable and useful skills of the future.

Appendix B1.5: School student ethnicity data

Student Statistics										2015TT	
Ethnic L1 Name	Student Level								Totals		Total
	7		8		9		10		Male	Female	
	M	F	M	F	M	F	M	F			
Asian	31	32	30	36	22	19	32	21	115	108	223
European	106	122	118	102	73	87	71	93	368	404	772
Maori	17	8	15	8	8	6	7	6	47	28	75
MELAA	4	4	5	3	1	2	3	5	13	14	27
Other			1					3	1	3	4
Pasifika	5	5	4	1	3	3	6	4	18	13	31
Totals	163	171	173	150	107	117	119	132	562	570	1132

Student Statistics										2015TT	
Ethnic L2 Name	Student Level								Totals		Total
	7		8		9		10		Male	Female	
	M	F	M	F	M	F	M	F			
African	3	2	1			1		2	4	5	9
Chinese	12	5	10	9	4	8	11	7	37	29	66
CookIslandMaori		1				1	1		1	2	3
Fijian	1	1	2	1	2	1	2	3	7	6	13
Indian	4	7	5	7	7	4	2	2	18	20	38
LatinAmerican				1			1		1	1	2
Maori	17	8	15	8	8	6	7	6	47	28	75
MiddleEastern	1	2	4	2	1	1	2	3	8	8	16
Niuean		2			1	1	1	1	2	4	6
NZEuropeanPakeha	94	99	100	86	61	66	59	70	314	321	635
Other	1	1	1		2		1	3	5	4	9
OtherAsian	9	13	11	15	8	5	14	8	42	41	83
OtherEuropean	13	24	18	16	12	21	12	23	55	84	139
Samoan	3		1				1		5		5
SouthEastAsian	5	6	4	5	1	2	4	4	14	17	31
Tongan			1				1		2		2
Totals	163	171	173	150	107	117	119	132	562	570	1132

APPENDIX C: DATA ANALYSIS DOCUMENTS

Appendix C1.1: Student survey data summary table example

Table C1.1a: Significance of gender, year level and ethnicity commentary

	Gender (Crammer V)	Year level (Gamma)	Ethnicity (Pearson Chi Square)
Q1 How do you feel about your subjects this year?	No	Yes. Strong negative relationship (-.349) liking lessens as year level increases Ch- Sq .000sig Y10 13.3% Y9 17.6% Y8 42.7% Y 8 tend to give more 'like a lot' responses. Y10 less 'like a lot' responses and more undecided responses	No
Q2 How good do you think you are at your subjects?	No	Yes Ch sq .000 Y8 34.5% Y9 18.3% Y10 11.6% Perception as very good lessens as they move up the school	No
Q3 How well do the subjects offered match your interests?	No	Yes (-.387) Strong relationship Ch sq= .004 Y8 4.0% Y9 17.7% Y10 11.2%	No
Q4 How did you decide the subjects you are now taking?	No	Yes	Yes Asian =friends SA/ Other = Subjects for a job
Q9 How important are the following in influencing subject choices?	Low significance Male = family , friends, community more likely	Low significance Y8 = grades, community leader	Yes Chi sq = .105 Asian group see workload and difficulty of subject more important than NZ European group
Q10 Did your parents like your subject choices?	NA	NA	
Q11 Do you feel you have enough information to make subject choices	Yes Girls less likely to feel they have	Yes Year 8 less likely feel they have enough info	No

for next year?	enough info		
Q12 Who would you go to for advice on subject choices?	Low significance Boys – more likely to go to whanau teacher Girls more likely to not know who to go to	Low significance Y8 = more likely to go to parents, family, whanau teacher, community leaders	Yes Students in higher classes: .041sig HOLA/ Cmty leaders for Asians if combine yes/ maybe
Q13 Did/ will you use information from any of the following to make your subject choices?	No	Little relationship Older students find school evenings more useful Parents = older students find less useful = Y8 less likely to use at all	Yes Asians and SA/ Other more likely to seek out information
Q16 How confident do you feel about making subject choices for next year?	Yes significant Boys more confident	No	No
Q17 How important or unimportant is it for you to consider the following when making subject choices?	No	No	Yes General skills more important for NZ European group
Q21 Have you decided on what career you would like to do in the future?	No	No	No
Q23 How did you decide what career to take?	No	No	Yes Opportunity came up slightly higher in NZE

Appendix C1.2: Parent/Caregiver and staff data theme analysis table examples

Table C1.2a: Parent/caregiver survey theme summary analysis example

Question	Response	Code	Themes	Researcher notes
Q1 How important do you think it is that your son/daughter consider the following when making subject choices?	<p>Enjoyment 71.4% VI</p> <p>VI+I</p> <p>Enjoyment 100%</p> <p>What they are good at 85.7%</p> <p>Subjects necessary to get qualifications 83.3%</p> <p>Necessary for chosen career 83.3%</p> <p>Not Important</p> <p>What they don't enjoy 11.1%</p> <p>Difficulty level of subject 14.3%</p> <p>Work load in subject 9.5%</p>	<p>SS</p> <p>SS FPL</p> <p>FPL</p> <p>SS</p> <p>SS SCH</p> <p>SCH</p>	<p>Enjoyment is a key factor</p> <p>Ability in subject and future plans also high.</p> <p>Level of difficulty and work load not seen as important</p> <p>While enjoyment is important what they don't enjoy is not?</p>	<p>Focus on the positive – engage, ment important</p> <p>Why not – so challenge is OK in mpursuit of a longer term goal?</p> <p>If enjoyment is important why is non-enjoyment not?</p>
Q2 How well do the school subjects offered match your son/daughter's interests?	<p>10% extremely well</p> <p>60% quite well</p> <p>100% well to extremely well</p>	SCH	All happy with school offer	How does thi match with their suggestions for improvement?
Q3 How important are the following influences on your son/daughter when making subject choices?	<p>Grades 33.3%</p> <p>Teachers 33.3%</p> <p>Leads to future studies 28.6%</p> <p>Interests 23.8%</p> <p>Career plans 23.8%</p> <p>VI+ I</p> <p>Interests 100%</p>	<p>SCH</p> <p>SCH</p> <p>FPL</p> <p>SS</p> <p>FPL</p> <p>SS</p>	<p>Interests important overall</p> <p>Grades and teachers important –</p>	<p>Future directions only just under 1/4</p> <p>Links to linking choices to future plans</p>
Q4 Do you agree with your son/daughter's	<p>Yes 70.0%</p> <p>Don't mind 20.0%</p> <p>No 10%</p>		Most agree.	Pressure by school system. Had role of advisor taken away. Concern at lack of time for discussion prior to making choice

<p>subject choices?</p>	<p>Several mention year level as transition stage – not ‘yet’ “It’s year 10 and with the junior/senior model what she has chosen in year 9/10 doesn’t effect her ability to chose subjects at year 11. I may have felt differently about subject choices if they had more of an impact on what she could pick at year 11.” Many talk about ‘enjoying’ and ‘wanting to learn’</p>	<p>SCH</p>		<p>Transition point? Parents putting importance on continued engagement and commitment to learning How much information do they have and from where? Linking liking to success</p>
<p>Q5 Have you used any of the following sources to find out more information about your son/daughter’s subject choices?</p>	<p>Course booklets 20.0% very useful Vu + U Subject teachers 75.0% Course booklets 70.0% School option evenings 75.0% Media 40.0% not used this resource School careers teacher/ Career expos, NCEA info sources, Career websites 35.0% not used</p>	<p>SCH SCH SCH MED SCH MED SCH</p>	<p>School the most common source of information Teachers showing as important as a source of information External providers not being used –</p>	<p>How accessible is good information through the schools Puts a large onus on accuracy of information How aware are they of these?</p>
<p>Q6 Who would you suggest your son/daughter go to for advice to help them make subject choices?</p>	<p>Subject teacher 76.2% Family 71.4 % HOLA 66.7% Careers teacher 61.9% Yes + maybe Family members 100% Careers teacher 95.2% Subject teachers 90.5% No Friends 52.4% 3 respondents don’t know</p>	<p>SCH SCH MED SCH</p>	<p>Subject Teachers seen as a source of advice Followed by family Friends low source</p>	<p>Do subject teachers realise parents/ caregivers think this? How does it relate to how teachers see themselves? Differs from actual student behaviours!</p>

Table C1.2b: Staff survey theme summary analysis example

Questions	Response	Code	Themes	Researcher Notes
Q1 How important are the following for students to consider when making subject choices?	Enjoyment 72.2% What they don't enjoy 52.9% VI+I	SS SS	Self-systems most important consideration	Agreement with all other groups
	Enjoyment 100% What they don't enjoy 82.3% Interests and talents outside school 82.3% What they're good at 77.8% Range of subjects 77.8% Quals 66.7% Not important Are subjects necessary for a chosen career 11.1% Work load 11.1%	SS SS SS SS SS FPL FPL FPL SCH	Career and goals are ranked low	Recognition of dislikes – but what makes a student dislike? Extra curricular interests appear
Q2 How well do you think subjects offered match students' interests?	72.2% well or very well	SCH	Generally well catered for	Loewr agreement than parent/caregiver group – what's missing?
Q3 In your opinion, which are the common reasons students choose a subject?	Parents wanted them to 24% Subjects their friends were doing 24% Interested in it 22.2% Teachers 0%	K K SS K	See KI as prime influences Parents/ friends high Teachers seen as low factor ?	Friends recognised as an important influence – differs from parent/ caregiver group Interesting - so what role do they see themselves playing?
	Did not enjoy it 77.8% Moved to be with friends 55.6% Did not get on with teacher 33.3% Not good at it 33.3% Parents 0% Change of career direction 0%	SS K K SS K K	Enjoyment again Friends have some influence Teacher now seen as being a negative factor Ability also impacting Parents and career no impact	Teacher importance? No future planning/ study pathway consideration – is it discussed when changes discussed?
Q4 In your experience, what are the main reasons students change option subjects during a year?	Student request 66.7% VI+I Student request 100% Student academic record in the	K K K SCH	Student voice being given Ability a big factor Teachers have big influence	Student numbers dictating choice? Need for smooth transition Need to know student needs

<p>students or assigning students to option subjects?</p>	<p>subject/ related subject 83.4% Teacher request 77.8% Parent request 72.2% Staffing 55.5% Least important timetable 33.3%</p>		<p>Parent quest also Staffing important Timetable not seen as important Student numbers in the class Need for flow onto [redacted] Future pathway needed to be considered Student learning needs Lack of sufficient time to discuss reselected noted</p>	<p>Long term goals Career info Provided by whom? School structure dictating choice Importance of family Matches Hipkins quote – who is dictating delivery which should be priority – learner needs or resourcing – limitations and restrictions due to this</p>
<p>Q6 In your experience, what are the main reasons students do not get into a chosen option subject?</p>	<p>Class too full 88.9% Timetable clash 77.8% Not offered at the school 44.4% Low numbers 38.9% Teacher recommendation 5.6% Parents don't agree 1.1.1% Did not have skills 0%</p>		<p>School structures biggest impact – resourcing issues KI not big impact Ability not important</p>	<p>Structures impact choices! Nearly half saying subject not offered – links to lower agreement that subjects offered match student interests?</p>
<p>Q7 How important do you think the following influences are when students make subject choices?</p>	<p>Friends 44.4% Interests 33.3% VI+I Interests 94.4% Grades/ exam results 76.4 % Friends/ teachers/ family 72.2% Media 33.3% important</p>		<p>Friends more very important than interests Interests rise with VI + I Grades rise in importance KI same level of influence Media 1/3 ?</p>	<p>Friends high level of influence – more so than interests – does this link to student responses?</p>
<p>Q8 Do you think you have enough information about NCEA courses at Y11 and beyond to advise your students?</p>	<p>22.5% have enough 38.9% little or no information Some info 38.9%</p>		<p>Very low level of information on NCEA</p>	<p>Teachers main source of information for parents who are main source of information for students – concern for schools! PD focus?</p>

Appendix C2.1: Data analysis codebook

Appendix C2.1: Code book

Code	Definition	Key words/ phrases	Notes
Pre-determined codes (from literature review)			
SS	Self-systems: referring to, emotions, perceptions, attitudes	"like; don't like; want; happy; enjoy; interested; good at; not good at"	"Like' – don't use when used to punctuate sentences.
KI	Key Informants: Identifies people/ roles	" mum, dad, brother, sister; teachers; friends"	Can include role models
DM	Decision making: process, skills	"Choosing, deciding, thinking about choosing	Include both actual process and proposed process
SCH	Refers to school structures, rules, programs, subjects, curriculum	" subject choices; timetable; courses, NCEA"	Subject names okay
FPL	Refers to ideas/ plans or views of the future	" job; career; leave school; could; going to; probably"	Indicate thinking about future also
MED	Media references	TV, movies, actors, musicians, social media	
Emerging codes			
IDTY	Identity – reference to a future self	"I want to be"; "I've always wanted to...; my whole life...;ever since..."	Possible self
INF	Provides information justifying choice	"because; so; if; Look up, to do..., work well..., get stuff done, keep fit, practice, develop, search, see what..., check..."	
SK	Self-knowledge	" I'm always...; I usually..."; "good at"; "bad at"	Skills, talents, achievements
ALT	Supplies alternative	" an ... or ...; ... and...; either ...or	Shows thought of other possibilities
ISK	Identified skills	"reading and writing", "co-operating..."	Specific or transferable skills

Appendix C2.2: Student survey open question analysis example

Q11. What other information would you like to have? (Researcher memos)

- I would like to know what I want to end up doing in college so I can choose options that will steer me in the right direction
(FPL)
- Are we allowed to choose the technology or are the teachers are going to choose or we rate them and then the teachers are going to choose? which one is it? (Allowed or choice? Who chooses. Idea that parameters for choice are set by school)
- More about what it involves and careers it could lead into (FPL)
- How hard the exams are
- Have some catch up classes in the library some lunches.
- Just an explanation on what each option has to offer to help me understand what some of the options are and what they can offer me for the future
- What is contained in the courses and the estimated work load of the option.
- what type of activities will be in that class
- Information about
- I don't feel that I have gotten any information about subjects next year.
- I want to know what the choices are and whether they would be right for me. I want next years options to help me with a job
- I would like to know beforehand which subjects clash.
- I would maybe of liked abit more information on the subject i was gonna choose. Like under each subject have abit of an explanation on what we were gonna learn/do in that subject. It'd give people more information and have people taking more risks. (content and assessment concerns= skills and ability as choice deciders?)
- It's not exactly information it's more about what type of job i want in the future for me.
- more information on what my ideal career requires me to have
- What do you do in 'The Arts' in year 9? How do you choose your subjects for next year?
- I don't even know how the option system for year 9s and 10s work, I would be interested to know all of the information I need. (How course is taught – classroom environment)
- More examples of the things you might do. Not just the activity but how it teaches you in what way.
- I would be cool to know what sbjects the next school had so we knew in DETAIL what was comming
- What option subjects ther actually are
What I would learn in the options and classes I take next year to help me for my career .
(Careers and future strong theme)
- A small guide line of the course. Like whats we are going to be doing through out the year with in that topic.
- maybe more about animal skills-

15. What advice would you give a younger student/ friend who is trying to choose subjects?

- Do the ones you enjoy the most. Choose the ones that will be helpful to your future
- Choose carefully, think if you would enjoy that class and want to go and learn/participate. Have some sort of idea what job you would like to do when you are older or what you would like to study in university.
- choose what you are interested in
- maybe choose Japanese or Spanish for if you get a scholarship then it will become very useful (Strategic planning choosing a subject for future financial benefit? – done some research?)
- Do the ones that you think you will be good at
- Just choose things that you enjoy and that you are good at.
- Remember that it is your choice, and nobody else is to choose for you. Other people can give you advice, but in the end it is your choice. Think about what you want to do in the future, and look at your test/exam results to see your strengths and weaknesses, and what you want to do. (Strategic planner!)
- go for the ones you think you'll enjoy
- think of what you want to do in the future.
- To do what you love to do or something new that appeals to you that maybe you've never tried before
- Ask the teacher about the subject
- go for the ones you like and know you'll enjoy
- Stick to what you feel you could see yourself doing or love doing or want to find more about..

1. Interests

2. Future plans

3 Good at

Generally trending towards elimination of choice based on above

Little reference to wider skills provided by subjects, knowledge of pathway to get to goal

So how informed is their decision making process?

Not to use friends as motivation for choice is constantly referred to – so peer pressure out there?

Transition points noted between [] and [] – requiring change in tactics – how prepared are they for this?

Appendix C2.3: Year 8 Student interview coded analysis example

Focus group interview transcription Thursday 17 June 2015 (*Researcher memos*)

Interviewer: What makes you like a subject?

Y8B2. I think the reason people like subjects is because cos they're, they have experience or because they're good at them and that could be an issue because if you're already good at a subject then you're not choosing things that you don't like or you're not good at it, then you're not challenging yourself that will get you somewhere like in your career. (*Challenge brought up immediately and links to choosing a career*)

Y8B3 Well like the school offers like a taster of say a subject you – say if you get a good impression of that then you'll definitely continue (*Perceptions count*)

Y8B7 Maybe because they find it fun – cos they want to have fun doing it

Y8G8 Well like personally I thought I was going to do music and art cos um I'm reasonably good at both of them so I like there's some things that I don't know how to do in those subjects so why can't I continue on and learn more. (*Separating aspects of learning within a subject*)

Y8G6 When people choose certain subjects they ... usually know they can do it and so something they enjoy doing in doing so if you choose a subject that you've never done before and you can't do it and you don't like it you're kinda stuck with that for the rest of the year (*Concern at being trapped – affecting decision making – reluctant to take a risk?*)

Y8G4 I think if you're like successful at the subject and you're learning new things constantly and then you enjoy it more and also the teacher helps as well like different teachers also help performance yeah

Y8B2 I think ah, Dana reminded me of this but I think it helps if you've got friends or students that you quite like in that class as well

Interviewer: Who else would agree with that (counts) - all of you, OK.

Y8G9 Ah I personally want to see what my friends are choosing and if they all went into one subject then I'd choose that subject and that would make me like it more cos there'd be friends and like it's sort of like when you get a job, you have to do a job that you enjoy or else you won't enjoy it like obviously but like it'd be like a chore rather than - something

that you choose to do and I think it's a bit the same with the subjects - like if you enjoyed it it would like be – you'd enjoy coming to school but if you didn't enjoy it'd be like a chore coming to school like yeah *(Friends in classes important and do affect decision making)*

Y8G5 Um like I think if you're interested in it and you find like it would help you in your career path or something

Interviewer: You're (6) nodding Do you agree with that?

Y8G10 Yeah

Interviewer: We've had friends, liking, good an interest...Which would be the most important for you?

Y8B3 Um it'd probably be more the subject that correlates with the chosen career that we want to follow *(Career important when ranking)*

Y8G10 Um What your good at *(Strong interest so how when they don't know anything about it?)*

Y8G5 I think like how interested you are in it

Y8B7 Yeah I think like how interested you are in it.

Y8G2 M I think definitely for me it would be like how interested I am in the subject

Y8G8 For me it would be more friends

Y8G6 For me it would be whether I would be able to do the subject

Y8G9 O h yeah, how good I am at it

Y9B1 How it would affect my future

Y8G4 I think they're all important so...

Interviewer: You have to rank one?

Y8G4 Um probably how good you are at the subject and how interested you are in it so yeah

Interviewer: So what would make you take a subject you didn't like?

Y8B7 Like sort of the aspect of like you don't know what's gonna happen and you haven't learnt anything like that before. *(To try something new)*

Appendix C2.4: Year 9 student coded interview data analysis example

Interview transcription Thursday 17 June 2015 coding (*Researcher memos*)

Interviewer: What makes you like a subject?

Y9B1 Seeing people do it. Seeing that it's cool...yeah (*Peer concern*)

Y9B2 Something you have an interest in like if you're going to choose a subject you're obviously not gonna choose one you don't like and that way... (*Reason*)

Y9G3 Yeah same

Y9B4 Hobbies (*Extracurricular*)

Y9B5 If I'm good at it or something

Y9B6 I think also if you've um heard something about it. Also like in the name – you might read something and go oh that might be like giving things a go. (*Word of mouth – peers again. Challenge*)

Y9B2 I think maybe the description on the paper might help a bit, like, for one that doesn't give some of the better aspects. Like I know a few people like choose something and for like the trips and that. They don't choose it because they like it as such like film studies people chose it because they thought it was like watching films. (*Perception versus reality perhaps?*)

Y9G3 Yeah and like at the like, what's it called the thing that you kinda look at them?

Y9B2 Like the option night?

Y9G3 Yeah and then some of them looked more interesting than other ones.

Y9B2 The way it's advertised probably. (*Presentation of information has an influence*)

Y9G8 Maybe – and maybe it's like popularity. Maybe ones that everyone's talking about you may be influenced to join (*Presentation of information has an influence*)

Interviewer: What would make you take a subject that you don't like then?

Y9B1 Parents

Y9G7 Yeah

Y9G3 Friends

Interviewer: can you elaborate a bit what you mean by parents and friends

Y9B2 Peer pressure I guess like ... *(Peer pressure)*

Y9B1 Yeah

Y9B2 ... say you choose like film but all your friends do sports science and they're like 'come and do sports science its way more fun like but that could grow quite tiresome

Y9B1 Family could like be a big one 'cos if your choosing and your parents are around let's say you chose like film studies while your parents didn't want you to do it. They wanted you to change to somethink where ah like business academy. That could be another thing.

(Parent influences)

Interviewer: Late arriving student enters the room – stop to outline purpose of interview and get agreement to tape etc. completed.

Y9B6. Also along the parents thing like maybe yeah like maybe they want you to do something or like you may be pressured to like start doing things for like later life. Taking things quite seriously because like even at this age you might need to be like fixing on it as you – have a certain job. *(Being made to consider their future)*

Y9G7 Um Peer pressure because people like You might be better at something

Interviewer: what do you think are the most important subjects?

Y9G8 The ones that you – that might help you in the future *(Rated on importance for the future)*

Y9B6 Like me personally, I try harder in the subjects I enjoy or with the teachers I get on better with like if I don't get on with the teacher then I spend more time talking to my friends and that not concentrating on the teacher themselves. *(Teacher interaction important)*

Y9B1 I think that like all the difficult subjects are one's that really determine where you get like later on like I know like my Mum she dropped maths like as soon as she could because she did quite dislike it and now like she sometimes regrets it cos you can't have as many opportunities and my dad like he like chose to be a pilot but he could have been a doctor cos he continued all these things, he continued maths he continued physics he did science and all that and that's what I really want to do as well. *(Status of subject)*

Future planning – using family example as reference)

Appendix C2.5: Year 10 student interview data coded analysis example

Y10 Focus Group interview, Friday 13 June 2015 coded (*Researcher memos*)

Interviewer: The survey that you all participated in came out with the finding that you all saw "liking" a subject as a major factor in your choices. What makes you like or enjoy a subject?

Y10G1: Well, if you are good at a subject it tends to make you like it. Not all the time, but mostly if you're interested in it, in a subject, you tend to take it.

Y10B2: Yeah.

Y10B3: Yes .

Y10G4: Yeah.

T: Ok, so you have mentioned enjoying it, being good at it and having an interest in it. If you had to rank those three things, how would you do it?

Y10G4 Having a real interest in it.

Y10B3 Interest.

Y10G5 For me it's being good at it. (*I statement = self-knowledge*)

Interviewer: What would make you do a subject you don't like?

Y10G5. My parents.

Y10B2. Your friends.

Y10G1. Yeah.

Y10G6. If you need it for your future career.

Y10G5. Yeah.

Y10B7. Wanting to try something new. (*I statement = self-knowledge*)

Y10G1. Yeah.

Y10B5. Pushing yourself to do something that's out of your comfort zone. (*Challenge motivation again*)

Interviewer: How many of you have chosen subjects for any of those reasons?

(Counts hands) 7 of you.

Interviewer: Would anyone like to expand of any of those answers?

Y10G5. My parents are always like, trying to convince me to be like, to do like, do something that will help me when I'm older or will help me to get a lot of money. And my Mum wanted me to do art, so I took it 'cos she likes art. That's basically it. (*Parent voice – even in what is liked.*)

Interviewer: Anyone else. Someone said friends. Why would friends make you want to do a subject?

Y10B2. 'Cos you want to be in their classes. (*Friends*)

(Long pause)

Interviewer: Someone mentioned challenge?

Y10B2 I chose photography 'cos I wanted to be a photographer. Like not be a photographer, just know how to. V

(Unclear, unable to be transcribed)*Interviewer: What do you think are the most important subjects?*

Y10G1. Maths.

Y10G5. English.

Y10G4. English.

Y10B2. PE.

Y10G4. Maths and English are the most used subjects, you know, in life. Relate to the most jobs. When you're trying to get a job. (*Subject = job skill*)

Y10B2. It depends on what sort of job you're trying to get. If you want to be a personal trainer or something, PE would be good. (*Again a reference to subject in relation to job specific skill.*)

Y10G1. But it's not always, like, the maths and English that are important. Like just say,, if you wanted to be, like an artist you wouldn't take maths and English because you don't need that to be what you want to do, but not necessarily just basic stuff really. So sometimes it's most important about what you want to do.

Appendix C2.6: Examples of qualitative data theme analysis tables

Table C2.6a: Student Focus Group Interview analysis/ Open ended questions from Questionnaire: themes/ subthemes/ emerging themes/ decision making/ researching

	Year 8	Year 9	Year 10	Questionnaire open questions data notes	Researcher notes	Research links
DECISION MAKING						
Researching (finding information, receiving, using information, sources of information)	Try and search up about them – what they are like/ what you do Unsure of the process – do not yet have this information Friends	Discussed with parent ///// Looked at info booklets Rushed as arrived late to the school School organisation “ ... how I choose it was my older brother got options and they got the descriptions, ... me and my parents and also my older brother we all sat round and it really didn't take that long cos I knew that I wanted to be an architect so ah my brother recommended some. So like ok so these are ok and we chose it so that was decided.” “ You actually kinda searched it out – what am I going to need? What am I going to do? ... What they want from me.” Family///// Friends///// Option night	Try out as many options as possible / Ask someone at the school – what they did, if they liked it, what teachers were like Just think about all the options Sibling recommendation Ask when go to next school Students at schools opinions Bias of these students/ parent perceptions noted Community perceptions – school reputation “Now I've been to the careers expo I'm like oh I could have taken that, I could have taken that and it would have made my life a whole lot easier	Several instances of students 'waiting ' for information to be given to them – not active researchers Many not yet aware of what they may choose from – again waiting for the information to come to them Lot saying they have no information – waiting again? Several noting that it is an important decision – needing 'wisdom' – this also requires information Ask parents - Done only if 'stuck' after tried on their own So how informed is their decision making process?	Y8 Where? Info from who? Info mediated by sibling Y9 Information overload and little time for consideration – important to consider this with late arriving student Expert sibling (studying medicine at uni) led decision making Y10 Too much pressure from outside – confused/ frustrated? Information filtered through another – is there a fit? – how objective is this method? No research despite knowing direction – narrow viewpoint? Friends and older siblings/ friends Questioning reliability of information source –	Bandura 2006 Ormond et al 1991 Warton et al 1997 Foskett et al 2001 Loch 2009 Blenkinsop et al 2006 Foskett et al 2001 Wikeley et al 1999 Madjar et al 2009 Wylie et al 2008 Vaughan 2008 Vaughan et al 2006

		How its advertised /	next year – for every year.”/// Sibling role model	wanting to justify own choice the motivation? Community influences / Perceptions of parents/ peers/ siblings Family involved in choosing – had definite direction. Family main source of information	Bandura 2006 Blenkinsop et al 2006 Madjar et al 2009
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Table C2.6b: Decision making/ researching theme comparison across all data

Theme Code	Questionnaire	Student Interview	Parent/ Caregiver Survey	Staff Survey	Documents	Research	Researcher notes
Decision making							
Researching	<p>Considerations</p> <p>Quals for planned career 49.8%</p> <p>Idea of career direction 47.1%</p> <p>Skills and attributes for career 46.3%</p> <p>General skills 39%</p> <p>Study plans 33.8%</p> <p>Most keeping on with subjects from this year 65.8%</p> <p>do not know quals needed for chosen career 20.3%</p> <p>think they need a uni degree</p> <p>Not enough NCEA info 43.3%</p> <p>little or no info 11.2%</p> <p>enough 18.7%</p> <p>don't see as needed at their level</p>	<p>Not actively searching out information</p> <p>Family key inf sources for most on future direction</p> <p>Friends and students in older classes a common source of information on subjects, teachers – especially for Y10</p>	<p>Course info booklets</p> <p>NCEA info</p> <p>28.6% feel they do not have enough info</p> <p>66.7% little or no info</p>	<p>22.2 % have enough info on NCEA</p> <p>55.6 not enough</p> <p>11.1 % feel NCEA knowledge is not important</p> <p>T see themselves as most important source of info</p> <p>Most have enough info to advise on careers</p>	<p>CEG – supports informed decisions about “... subject choices and pathways.” P1</p> <p>- know where to find info on courses and careers</p> <p>Encourages students to ask HOLA's for further advice</p> <p>Suggests they think carefully before making the choice</p>	<p>Blenkinsop et al 2006</p> <p>Loch 2009</p> <p>Wikeley et al 1999</p> <p>Madjar et al 2009</p> <p>Wylie et al 2008</p> <p>Vaughan 2008</p> <p>Vaughan et al 2006</p> <p>Foskett et al 2001</p> <p>ERO2015</p> <p>ERO 2014</p>	<p>Changing option rate =students not limiting themselves to one set of choices.</p> <p>Lack of link between learning and future = lack of link between making subject choice and needing to look beyond today</p> <p>What information do they have and how accurate is it?</p> <p>MSD – asks student to think carefully but about what?</p> <p>How informed are informers?</p>

Appendix C2.7 Parent/caregiver survey open question responses example

Parent survey open question responses

Q4 Do you agree with option choices? Why/ Why not?

- My son was involved with choosing these
- My daughters third choice option was only because she couldn't get into the Drama option due to conflicting schedules. She was asked to choose another, which I didn't think was a good choice. She was put on the spot and asked to pick another subject then and there. Would have been appreciated if she had of had a night to discuss with us as parents before making the decision. (*Pressure by school system. Had role of advisor taken away. Concern at lack of time for discussion prior to making choice*)
- Going into year 9 as long as they are interested and wanting to learn. Getting balance is important. (*Transition point?*)
- They are appropriate
- As long as she is happy with her choices and can give 100% (*Parents putting importance on continued engagement and commitment to learning*)
- It's year 10 and with the junior/senior model what she has chosen in year 9/10 doesn't effect her ability to chose subjects at year 11. I may have felt differently about subject choices if they had more of an impact on what she could pick at year 11. I did think it was important to try as many different options in year 9/10 as possible as a 'taste' of what was available. (*How much information do they have and from where?*)
- A mix of what she enjoys & core subjects which ensures she'll enjoy some (hopefully all) of her lessons
- The subjects my son chose are his strengths, interests and from the available choices, were the ones he enjoyed.
- Hasn't chosen yet
- I think Whatever she like it, She will success. (*Linking liking to success*)
- My son is in year 8 and has not yet chosen his options

Q7 What other information would you like to have?

- My son may be moving to [redacted] next year so will see what the subjects are there. I/we found enough information about the subjects he took in year 9 & 10 to be sufficient enough to decide on what he wanted to take.
- I don't yet have any information. My son is in year 8 and we have not started discussing options yet. We will attend an information evening soon. (*Transition – not needed yet?*)
- A lot What support is to be in place for learning difficulty students

Appendix C2.8: Staff open question theme analysis example

5. What other factors might you consider?

- The number of students already doing that subject (especially Tech subjects). *(Student numbers dictating choice?)*
- Whether the subject is offered by [redacted] and what they cover in their curriculum (how well does it 'marry' with our curriculum) *(Need for smooth transition)*
- Prior knowledge of the student's interests and possible future pathways.
- I don't think a full timetable of Option subjects is relevant for students who have little or no ability to read and write (either for ESOL or ability related). I think more time spent learning to read and write would benefit in the long run rather than learning specialised subject information. *(Need to know student needs. Long term goal)*
- Career options for those who know what they want to do. *(Provided by whom?)*
- Learners have missed out on their preferred Option subject choice due to numbers being too high, and some have had to reselect without being able to discuss with family members. The reason Option Choices are made relatively early prior to following school yes is so learners get their first and most desired choices, staffing should then be selected/allocated to meet the needs of our learners, NOT the other way round! *(School structure dictating choice. Importance of family. Matches Hipkins quote – who is dictating delivery which should be priority – learner needs or resourcing – limitations and restrictions due to this)*

Q11 Do you feel you have enough information on career pathways to advise your students? What other information would you like to have?

- Innovations at present that are likely to inform future career opportunities.
- A more robust Careers Department at [redacted] would be wonderful! I would like to see a classroom permanently set up with guest speakers/young members of the community/parents/business entrepreneurs coming in often, constant innovative information available for our learners. *(Desire for greater careers profile within the school)*
- I must say I have not had much experience in advising option choices. Neither have I attended an option evening. I assume this is where the majority of information is transferred to students and their families. So I have had little information, not because it is not out there... Maybe if students could indicate through a survey which they are considering and then advice and guidance is given to them before final choices are submitted? *(School important source of information then? Does this person feel they should know?)*
- Pathways for subjects which are offered in our school.

(Focus on skills BUT no awareness of possible barriers created by choices made at this level)

Appendix C2.9: Document analysis table

Table C3.1 Document review analysis

	Government documents (Curriculum, NAGS ERO, NZCER)	School Option policy	School Career policy	Researcher notes
DECISION MAKING				
Planning	Most principals say clear pathways and supports for course are provided (72%) 1/5 parents want more support from schools for decision making	Awareness of importance of decision making and planning	Aim = “ to develop an awareness of the importance of decision-making and planning...”	School gives no suggestions as to how to go about making subject choice decisions – just gives basic information on content and then how to complete the process Maybe the development and provision of a decision making guide would assist this?
Researching	Nags – research work and learning options to manage changing world. CEG – supports informed decisions about “ ... subject choices and pathways.” P1 - know where to find info on courses and careers Academic counselling strong in schools – BUT what about at middle school level? 1/5 parents want more support from schools for discovering passions and interests Wanted more work experience opportunities 15% 90% Teachers talk to students about link subject to careers	Encourages students to ask HOLA’s for further advice Suggests they think carefully before making the choice	Notes increased pressure for students to research work and learning options and manage pathways Provide opportunities for students to become aware of opportunities available	Asked to think carefully – but about what? Definite links between subject choices and future pathways Parents saying they do not have the knowledge or information to give informed advice
Elimination	CEG = “ students knew it was important to choose subjects that kept their options open. “ p2 CEG - Identify a range of career opportunities 90% Teachers talk to students about link subject to careers	First choice requires elimination from given selection Then option lines may require further elimination Options available eliminated by resourcing/ timetable		Process of elimination established – but what are the criteria and who, how are these determined?

Motivation	CEG = sense of direction = relevance of learning = remain at school			Links engagement
FUTURE PLANNING				
Goals	1/5 parents want more support from schools		Aims to assist students to develop an action plan to achieve career goals	In agreement on need but how?
Study plans	CEG = Identify possible pathways = make plans and work towards them = sense of direction BUT assessment driving design in Y9 and Y 10 as well as senior years 1/5 parents want more support from schools			How much are student subject choices being driven by assessment needs also?
Careers	CEG = " students knew it was important to choose subjects that kept their options open. " p2 CEG = Identify possible careers 90% talk to students about link subject to careers	Make life and career enhancing decisions		Direct link between subject choices and careers made in policy
SELF-SYSTEMS				
Attitude	CEG – responds to emerging interests strengths and aspirations		Assist to identify interests and values	
Ability perceptions	" achieve potential" Self-concept Identify distinctive characteristics (interest values, strengths, work and training) assessment driving design in Y9 and Y 10 as well as senior years		Assist to identify ability	How is ability being assessed – assessment results. What happens to as yet unnoticed/ unassessed potential ability (e.g in subjects not yet experienced)?
Well being		Independence, excellence and creative spirit seen as important in school docs. Interact positively with others Life-long learning	Ultimate goal = to increase student well-being throughout their lives"	What impacts on this?

Appendix C3.1: SPSS variable relationship tables

Q9: Table C3.1a: Relationships between influences on subject choices and year level

Influence	Year 8	Year 9	Year 10	Significance
Key Informants	(number) %	(number) %	(number) %	
Family				χ^2 p = .149
Very Important	57 46.0	38 39.6	40 41.2	
Important	55 44.4	40 41.7	35 36.1	
Neither important nor not important	11 8.9	15 15.6	16 16.5	
Not important	1 0.8	3 3.1	6 6.2	
Friends				χ^2 p = .651
Very Important	31 24.8	20 20.8	15 15.6	
Important	49 39.2	37 38.5	43 44.8	
Neither important nor not important	34 27.2	28 29.2	31 32.3	
Not important	11 8.8	11 11.5	7 7.3	
Teachers				χ^2 p = .229
Very Important	32 26.2	15 15.6	20 20.6	
Important	61 50.0	54 56.3	45 46.4	
Neither important nor not important	25 20.5	19 19.8	27 27.8	
Not important	4 3.3	8 8.3	5 5.2	
Community leaders				χ^2 p = .313
Very Important	8 6.7	5 5.3	4 4.1	
Important	39 32.8	31 33.0	21 21.6	
Neither important nor not important	55 46.2	40 42.6	48 49.5	
Not important	17 14.3	18 19.1	24 24.7	
Self-Systems				
Interests				χ^2 p = .237
Very Important	60 49.6	62 65.3	60 61.9	
Important	57 47.1	28 29.5	33 34.0	
Neither important nor not important	3 2.5	4 4.2	3 3.1	
Not important	1 0.8	1 1.1	1 1.0	
Enjoyment				χ^2 p = .225
Very Important	63 52.1	58 60.4	59 60.8	
Important	53 43.8	30 31.1	30 30.9	
Neither important nor not important	5 4.1	7 7.3	8 8.2	
Not important	0 0.0	1 1.0	0 0.0	
Grades/ Exam results				χ^2 p = .064
Very Important	60 48.4	42 43.8	35 36.1	
Important	54 43.5	36 37.5	51 52.6	
Neither important nor not important	10 8.1	14 14.6	8 8.2	
Not important	0 0.0	4 4.2	3 3.1	
Perceived difficulty of subject				χ^2 p = .091
Very Important	9 7.4	10 10.8	12 12.4	
Important	65 54.7	31 33.3	38 39.2	
Neither important nor not important	38 31.4	39 41.9	35 36.1	
Not important	9 7.4	13 14.0	12 12.4	
Future Planning				
Career plans				χ^2 p = .117
Very Important	52 42.6	39 40.6	41 42.3	
Important	57 46.7	47 49.0	35 36.1	
Neither important nor not important	13 10.7	8 8.3	18 18.6	
Not important	0 0.0	2 2.1	3 3.1	

Study plans				χ^2 p =.383
Very Important	48 40.0	34 35.8	36 37.1	
Important	60 50.0	40 42.1	43 44.3	
Neither important nor not important	10 8.3	17 17.9	14 14.4	
Not important	2 1.7	4 4.2	4 4.1	
Range of subjects				χ^2 p =.738
Very Important	33 27.5	21 22.3	22 22.9	
Important	56 46.7	41 43.6	45 46.9	
Neither important nor not important	27 22.5	24 25.5	23 24.0	
Not important	4 3.3	8 8.5	6 6.3	
Information				
Media				χ^2 p =.976
Very Important	16 13.2	10 10.8	11 11.5	
Important	38 31.4	26 28.0	26 27.1	
Neither important nor not important	52 43.0	43 46.2	45 46.9	
Not important	15 12.4	14 15.1	14 14.6	
Workload				χ^2 p =.308
Very Important	19 15.7	9 9.6	14 14.4	
Important	53 43.8	34 36.2	42 43.3	
Neither important nor not important	41 33.9	41 43.6	29 29.9	
Not important	8 6.6	10 10.6	12 13.4	
Course content				χ^2 p =.938
Very Important	24 20.3	19 20.2	21 21.6	
Important	63 53.4	48 51.1	54 55.7	
Neither important nor not important	29 24.6	25 26.6	19 19.6	
Not important	2 1.7	2 2.1	3 3.1	

Q9: Table AC3.1b: Relationships between influences on subject choices and gender

Influence	Male (number) %	Female (number) %	Significance
Key Informants			
Family			χ^2 p = .048
Very Important	65 49.6	70 37.8	
Important	44 33.6	85 45.9	
Neither important nor not important	20 15.2	22 11.9	
Not important	2 1.5	8 4.3	
Friends			χ^2 p = .022
Very Important	27 20.6	39 21.1	
Important	63 48.1	65 35.1	
Neither important nor not important	27 20.6	66 35.7	
Not important	14 10.7	15 8.1	
Teachers			χ^2 p = .617
Very Important	32 24.8	35 18.9	
Important	64 49.6	95 51.4	
Neither important nor not important	27 20.9	44 23.8	
Not important	6 4.7	11 5.9	
Community leaders			χ^2 p = .001
Very Important	6 4.8	11 6.0	
Important	51 40.5	40 21.9	
Neither important nor not important	43 34.1	99 54.1	
Not important	26 20.6	33 18.0	
Self-Systems			
Interests			χ^2 p =.308

Very Important	70 54.7	111 60.3	
Important	54 42.2	64 34.8	
Neither important nor not important	4 3.1	6 3.3	
Not important	0 0.0	3 1.6	
Enjoyment			χ^2 p =.597
Very Important	70 54.3	109 59.2	
Important	49 38.0	64 34.8	
Neither important nor not important	10 7.8	10 5.4	
Not important	0 0.0	1 0.5	
Grades/ Exam results			χ^2 p =.295
Very Important	49 38.0	88 47.1	
Important	60 46.5	80 42.8	
Neither important nor not important	17 13.2	15 8.0	
Not important	3 2.3	4 2.1	
Perceived difficulty of subject			χ^2 p =.396
Very Important	17 13.2	14 7.7	
Important	56 43.4	78 43.1	
Neither important nor not important	44 34.1	67 37.0	
Not important	12 9.3	22 12.2	
Future Planning			
Career plans			χ^2 p =.494
Very Important	57 44.2	75 40.5%	
Important	57 44.2	82 44.3	
Neither important nor not important	12 9.3	26 14.1	
Not important	3 2.3	2 1.1	
Study plans			χ^2 p =.429
Very Important	42 32.8	76 41.5	
Important	65 50.8	77 42.1	
Neither important nor not important	17 13.3	24 13.1	
Not important	4 3.1	6 3.3	
Range of subjects			χ^2 p =.383
Very Important	27 21.4	49 26.8	
Important	63 50.0	78 42.6	
Neither important nor not important	31 24.6	43 23.5	
Not important	5 4.0	13 7.1	
Information			
Media			χ^2 p =.163
Very Important	17 13.3	20 11.0	
Important	43 33.6	47 26.0	
Neither important nor not important	56 43.8	83 45.9	
Not important	12 9.4	31 17.1	
Workload			χ^2 p =.360
Very Important	22 17.1	20 11.0	
Important	55 42.6	74 40.7	
Neither important nor not important	41 31.8	69 37.9	
Not important	11 8.5	19 10.4	
Course content			χ^2 p =.182
Very Important	22 17.3	42 23.2	
Important	77 60.6	87 48.1	
Neither important nor not important	26 20.5	47 26.0	
Not important	2 1.6	5 2.8	

Q9: Table Ac3.1c: Relationships between Influences on subject choices and ethnicity

Influence	New Zealand European	Asian	South African/ Other European	Significance
Key Informants	(number) %	(number) %	(number) %	
Family				χ^2 p = .959
Very Important	92 42.4	23 44.2	9 34.6	
Important	89 41.0	23 44.2	12 46.2	
Neither important nor not important	29 13.4	5 9.6	4 15.4	
Not important	7 3.2	1 1.9	1 3.8	
Friends				χ^2 p = .603
Very Important	44 20.2	15 29.4	3 11.5	
Important	89 40.8	19 37.3	11 42.3	
Neither important nor not important	67 30.7	12 23.5	10 38.5	
Not important	18 8.3	5 9.8	2 7.7	
Teachers				χ^2 p = .930
Very Important	45 20.7	10 19.6	6 23.1	
Important	110 50.7	28 54.9	14 53.8	
Neither important nor not important	50 23.0	11 21.6	6 23.1	
Not important	12 5.5	2 3.9	0 0.0	
Community leaders				χ^2 p = .519
Very Important	12 5.6	1 2.0	0 0.0	
Important	64 30.0	16 31.4	7 26.9	
Neither important nor not important	94 44.1	25 49.0	16 61.5	
Not important	43 20.2	9 17.6	3 11.5	
Self-Systems				
Interests				χ^2 p = .907
Very Important	125 58.4	28 54.9	17 63.0	
Important	82 38.3	20 39.2	9 33.3	
Neither important nor not important	6 2.8	2 3.9	1 3.7	
Not important	1 0.5	1 2.0	0 0.0	
Enjoyment				χ^2 p = .356
Very Important	130 60.2	28 54.9	13 50.0	
Important	73 33.8	22 43.1	10 38.5	
Neither important nor not important	13 6.0	1 2.0	31 1.5	
Not important				
Grades/ Exam results				χ^2 p = .328
Very Important	88 40.4	25 49.0	16 59.3	
Important	102 46.8	22 43.1	7 25.9	
Neither important nor not important	23 10.6	3 5.9	4 14.8	
Not important	5 2.3	1 2.0	0 0.0	
Perceived difficulty of subject				χ^2 p = .007
Very Important	13 6.1	8 16.0	5 19.2	
Important	90 42.1	29 58.0	8 30.8	
Neither important nor not important	84 39.3	10 20.0	11 42.3	
Not important	27 12.6	3 6.0	2 7.7	
Future Planning				
Career plans				χ^2 p = .302
Very Important	96 44.4	15 29.5	12 44.4	
Important	94 43.5	26 51.0	13 48.1	
Neither important nor not important	23 10.6	10 19.6	2 7.4	
Not important	3 1.4	0 0.0	0 0.0	
Study plans				χ^2 p = .456
Very Important	83 38.8	18 35.3	11 42.3	
Important	93 43.5	28 54.9	13 50.0	
Neither important nor not important	32 15.0	3 5.9	2 7.7	

Not important	6 2.8	2 3.9	0 0.0	
Range of subjects				χ^2 p =.293
Very Important	51 24.1	15 30.0	5 18.5	
Important	91 42.9	25 50.0	16 59.3	
Neither important nor not important	55 25.9	9 18.0	6 22.2	
Not important	15 7.1	1 2.0	0 0.0	
Information				
Media				χ^2 p =.233
Very Important	27 12.7	6 11.8	1 3.8	
Important	62 29.2	16 31.4	6 23.1	
Neither important nor not important	90 42.5	27 52.9	15 57.7	
Not important	33 15.6	2 3.9	4 15.4	
Workload				χ^2 p =.079
Very Important	24 11.2	7 13.7	4 15.4	
Important	85 39.5	30 58.8	9 34.6	
Neither important nor not important	79 36.9	12 23.5	12 46.2	
Not important	26 12.1	2 3.9	1 3.8	
Course content				χ^2 p =.730
Very Important	45 21.1	8 16.0	7 26.9	
Important	110 51.9	30 60.0	14 19.2	
Neither important nor not important	52 24.5	12 24.0	5 19.2	
Not important	5 2.4	0 0.0	0 0.0	

AC3.1d: Q2 by Year level and gender %

χ^2 p = .000	Year 8	Year 9	Year 10	χ^2 p = .073	Male	Female
Very good	34.5	18.3	11.6		27.0	19.8
Good	45.5	39.0	40.7		45.2	41.9
Neither good nor not good	20.0	40.7	47.7		27.8	40.7

AC3.1e Q1 X Q2 by year level and gender %

χ^2 p = .000	Year 8	Year 9	Year 10	Male	Female
Very good/ Like a lot	61.7	57.1	25.0	58.6	52.3
Very good/ Like	14.6	15.0	13.5	16.4	12.9
Very good/ Neither like nor dislike	5.3	4.2	5.4	11.1	1.9
Good / Like a lot	36.2	42.9	58.3	41.4	40.9
Good/ Like	63.4	47.5	56.8	56.4	54.8
Good/ Neither like nor dislike	36.8	25.0	18.9	29.6	22.6
Neither good nor not good/ Like a lot	2.1	0.0	16.7	0.0	6.8
Neither good nor not good /Like	22.0	37.5	29.7	27.3	32.3
Neither good nor not good/ Neither like nor dislike	57.9	70.8	75.7	59.3	75.5

AC3.1f Q4 x Year level

	Year 9	Year 10	Significance
I chose the subjects I'm most interested in	80.2	87.9	χ^2 p = .143

I chose the subjects I'm good at	24.0	31.3	χ^2 p = .251
I chose a range of subjects to keep my options open in the future	29.2	47.5	χ^2 p = .009
I need particular qualifications for what I want to do	8.3	13.1	χ^2 p = .280
I chose the subjects that would get me into university	4.2	9.1	χ^2 p = .168
I'm doing these subjects because my parents wanted me to	6.3	6.1	χ^2 p = .956
I'm doing these subjects because my teachers suggested them	3.1	0.0	χ^2 p = .076
I couldn't think what else to do	8.3	11.1	χ^2 p = .513
I chose the subjects that my friends are doing	6.3	5.1	χ^2 p = .717
I chose the subjects that are easy	0.0	1.0	χ^2 p = .324
I didn't really think about it much	3.1	2.0	χ^2 p = .626
I chose subjects that would get me a job	12.5	10.1	χ^2 p = .597

AC3.1g Q4 X gender %

	Male	female	Significance
I chose the subjects I'm good at	22.5	20.6	χ^2 p = .693
I chose a range of subjects to keep my options open in the future	27.1	29.6	χ^2 p = .628
I need particular qualifications for what I want to do	7.8	8.5	χ^2 p = .820
I chose the subjects that would get me into university	4.7	7.9	χ^2 p = .247
I'm doing these subjects because my parents wanted me to	3.9	3.7	χ^2 p = .937
I'm doing these subjects because my teachers suggested them	0.8	1.6	χ^2 p = .523
I couldn't think what else to do	5.4	6.3	χ^2 p = .733
I chose the subjects that my friends are doing	3.9	3.2	χ^2 p = .737
I chose the subjects that are easy	0.8	0.5	χ^2 p = .785
I didn't really think about it much	1.6	1.6	χ^2 p = .979

AC3.1h Q4 x ethnicity %

	NZ European	Asian	South African/ Other	Significance
I chose the subjects I'm most interested in	60.0	64.2	57.1	χ^2 p = .799
I chose the subjects I'm good at	20.0	30.2	17.9	χ^2 p = .239
I chose a range of subjects to keep my options open in the future	27.0	32.1	32.1	χ^2 p = .684
I need particular qualifications for what I want to do	7.9	9.4	10.7	χ^2 p = .846
I chose the subjects that would get me into university	7.0	1.9	14.3	χ^2 p = .104
I'm doing these subjects because my parents wanted me to	3.3	1.9	7.1	χ^2 p = .452
I'm doing these subjects because my teachers suggested them	1.4	1.9	0.0	χ^2 p = .779
I couldn't think what else to do	5.6	5.7	0.0	χ^2 p = .438
I chose the subjects that my friends are	2.3	9.4	3.6	χ^2 p = .050

doing				
I chose the subjects that are easy	0.5	1.9	0.0	χ^2 p = .475
I didn't really think about it much	0.9	3.8	0.0	χ^2 p = .223
I chose subjects that would get me a job	9.8	1.9	17.9	χ^2 p = .049

AC3.1i Q1 X Q2 XQ9 Year level

	Like a lot			Like			neither like nor dislike		
	Y8	Y9	Y10	Y8	Y9	Y10	Y8	Y9	Y10
Family Y8 χ^2 p = .000 Y9 χ^2 p = .011 Y10 χ^2 p = .267									
Very important/ Very good	65.2	57.1	20.0	0.0	16.7	16.7	0.0	0.0	16.7
Very important / good	34.8	42.9	60.0	73.3	41.7	61.1	42.9	35.7	25.0
Very important / neither good/ nor not good	0.0	0.0	20.0	26.7	41.7	22.2	42.9	64.3	58.3
Important/ Very good	52.4	60.0	16.7	20.0	18.2	8.3	14.3	0.0	0.0
Important / good	42.9	40.0	66.7	55.0	50.0	58.3	14.3	0.0	15.4
Important / neither good/ nor not good	4.8	0.0	16.7	25.0	31.8	33.3	71.4	100.0	84.6
Neither important nor not important/ Very good	100.0	100.0		0.0	0.0	25.0	0.0	20.0	0.0
Neither important nor not important/ good	0.0	0.0		100.0	50.0	50.0	33.3	20.0	11.1
Neither important nor not important/ neither good/ nor not good	0.0	0.0		0.0	50.0	25.0	66.7	60.0	11.1
Friends				Y8 χ^2 p = .000	Y9 χ^2 p = .080	Y10 χ^2 p = .472			
Very important/ Very good	77.8	40.0		0.0	0.0	10.0	0.0	0.0	0.0
Very important / good	22.2	60.0		80.0	50.0	60.0	20.0	33.3	40.0
Very important / neither good/ nor not good	0.0	0.0		20.0	50.0	30.0	80.0	66.7	60.0
Important/ Very good	58.8	75.0	0.0	11.8	25.0	28.6	14.3	0.0	11.1
Important / good	41.2	25.0	83.3	58.8	50.0	42.9	42.9	27.3	16.7
Important / neither good/ nor not good	0.0	0.0	16.7	29.4	25.0	28.6	42.9	72.7	72.2
Neither important nor not important/ Very good	61.5	66.7	50.0	20.0	7.1	0.0	0.0	20.0	0.0
Neither important nor not important/ good	30.8	33.3	33.3	60.0	35.7	66.7	60.0	20.0	0.0
Neither important	7.7	0.0	16.7	20.0	57.1	33.3	40.0	60.0	100.0

nor not important/ neither good/ nor not good										
Grades / exam results		Y8 χ^2 p= .000			Y9 χ^2 p= .004		Y10 χ^2 p= .070			
Very important/ Very good	64.0	57.1	14.3	21.1	25.0	13.3	0.0		0.0	
Very important / good	32.0	42.9	71.4	52.6	50.0	60.0	28.6		22.2	
Very important / neither good/ nor not good	4.0	0.0	14.3	26.3	25.0	26.7	71.4		77.8	
Important/ Very good	52.6	60.0	40.0	0.0	16.7	18.8	11.1		4.5	
Important / good	47.4	40.0	40.0	86.7	33.3	56.3	33.3		13.6	
Important / neither good/ nor not good	0.0	0.0	20.0	13.1	50.0	25.0	55.6		81.8	
Neither important nor not important/ Very good	100.0	50.0		0.0	0.0	0.0	0.0		25.0	
Neither important nor not important/ good	0.0	50.0		50.0	55.6	50.0	66.7	50.0	25.0	
Neither important nor not important/ neither good/ nor not good	0.0	0.0		50.0	44.4	50.0	33.3	50.0	50.0	
Teachers		Y8 χ^2 p= .000			Y9 χ^2 p= .095		Y10 χ^2 p= .565			
Very important/ Very good	63.2	50.0	25.0	0.0	0.0	12.5	0.0	0.0	16.7	
Very important / good	36.8	50.0	75.0	60.0	80.0	50.0	100.0	33.3	33.3	
Very important / neither good/ nor not good	0.0	0.0	0.0	40.0	20.0	37.5	100.0	66.7	50.0	
Important/ Very good	40.0	66.7	0.0	13.6	35.3	15.8	7.7	5.9	5.9	
Important / good	53.3	33.3	100.0	72.7	29.4	57.9	30.8	29.4	11.8	
Important / neither good/ nor not good	6.7	0.0	0.0	13.6	35.3	26.3	61.5	64.7	82.4	
Neither important nor not important/ Very good	80.0	100.0	40.0	9.1	57.1	14.3	0.0	0.0	0.0	
Neither important nor not important/ good	20.0	100.0	20.0	54.5	57.1	57.1	100.0	0.0	9.1	
Neither important nor not important/ neither good/ nor not good	0.0	0.0	40.0	36.4	42.9	28.6	0.0	100.0	90.9	
Community leaders		Y8 χ^2 p= .108		Y9 χ^2 p= .504		Y10 χ^2 p= .368				
Very important/ Very good	66.7	50.0		0.0	0.0	50.0		0.0	0.0	
Very important / good	33.3	50.0		50.0	100.0	50.0		50.0	50.0	
Very important /	0.0	0.0		50.0	0.0	0.0		50.0	50.0	

neither good/ nor not good									
Important/ Very good	58.3	60.0	0.0	7.7	16.7	10.0	16.7	0.0	0.0
Important / good	41.7	40.0	100.0	76.9	33.3	80.0	33.3	25.0	40.0
Important / neither good/ nor not good	0.0	0.0	0.0	15.4	50.0	10.0	50.0	75.0	60.0
Neither important nor not important/ Very good	55.0	40.0	33.3	18.8	15.8	6.3	0.0	9.1	5.0
Neither important nor not important/ good	40.0	60.0	33.3	50.0	42.1	43.8	44.4	72.7	10.0
Neither important nor not important/ neither good/ nor not good	5.0	100.0	33.3	31.3	14.3	50.085.0	55.6	0.0	
Career plans			Y8 χ^2 p = .001		Y9 χ^2 p = .032		Y10 χ^2 p = .442		
Very important/ Very good	62.5	40.0	22.2	21.4	27.8	11.8	0.0	0.0	0.0
Very important / good	37.5	60.0	55.6	64.3	50.0	47.1	33.3	30.0	37.5
Very important / neither good/ nor not good	0.0	0.0	22.2	14.3	22.2	41.2	66.7	70.0	62.5
Important/ Very good	52.9	66.7	0.0	5.3	5.3	18.2	7.7	10.0	11.1
Important / good	41.2	33.3	100.0	68.4	47.4	72.7	30.8	20.0	0.0
Important / neither good/ nor not good	5.9	0.0	0.0	26.3	47.4	9.1	61.5	20.0	88.9
Neither important nor not important/ Very good	66.7	0.0	100.0	0.0	47.4	12.5	0.0	70.0	0.0
Neither important nor not important/ good	33.3		0.0	60.0	0.0	50.0	50.0	25.0	28.6
Neither important nor not important/ neither good/ nor not good	0.0		0.0	40.0	100.0	37.5	50.0	75.0	71.4
Enjoyment of subject			Y 8 χ^2 p = .000		y9 χ^2 p = .000		y10 χ^2 p = .033		
Very important/ Very good	68.0	60.0	0.0	9.1	16.0	16.7	0.0	0.0	5.3
Very important / good	32.0	40.0	80.0	50.0	40.0	50.0	28.6	41.7	21.1
Very important / neither good/ nor not good	0.0	0.0	20.0	400.9	44.0	33.3	71.4	58.3	73.7
Important/ Very good	47.1	50.0	20.0	14.3	10.0	10.0	10.0	10.0	7.1
Important / good	52.9	50.0	60.0	85.7	60.0	70.0	40.0	10.0	14.3
Important / neither good/ nor not good	0.0	0.0	20.0	0.0	30.0	20.0	50.0	80.0	78.6
Neither important nor not important/	50.0		100.0	0.0	25.0	0.0	0.0	0.0	0.0

Very good									
Neither important nor not important/ good	0.0		0.0	100.0	50.0	50.0	0.0	0.0	0.0
Neither important nor not important/ neither good/ nor not good	50.0		0.0	0.0	25.0	50.0	100.0	100.0	100.0
Media	Y8 χ^2 p = .005			Y9 χ^2 p = .231			Y10 χ^2 p = .521		
Very important/ Very good	71.4	50.0	0.0	33.3	0.0	20.0	0.0	0.0	0.0
Very important / good	28.6	50.0	100.0	66.7	33.3	40.0	0.0	0.0	25.0
Very important / neither good/ nor not good	0.0	0.0	0.0	0.0	66.7	40.0	100.0	100.0	75.0
Important/ Very good	52.9	71.4	0.0	7.7	50.0	27.3	33.3	0.0	11.1
Important / good	47.1	28.6	80.0	61.5	37.5	54.5	66.7	20.0	22.2
Important / neither good/ nor not good	0.0	0.0	20.0	30.8	12.5	18.2	0.0	80.0	66.7
Neither important nor not important/ Very good	62.5	0.0	60.0	0.0	9.5	5.9	0.0	8.3	5.9
Neither important nor not important/ good	37.5	100.0	40.0	82.4	42.9	52.9	22.2	33.3	11.8
Neither important nor not important/ neither good/ nor not good	0.0	0.0	0.0	17.6	47.6	41.2	77.8	58.3	82.4
Difficulty of subject	Y8 χ^2 p = .068			Y9 χ^2 p = .255			Y10 χ^2 p = .116		
Very important/ Very good	50.0	66.7		0.0	50.0		0.0	0.0	
Very important / good	50.0	33.3	100.0	10.0	50.0	25.0	0.0	33.3	20.0
Very important / neither good/ nor not good	0.0	0.0	100.0	0.0	0.0	75.0	100.0	66.7	80.0
Important/ Very good	63.6	60.0	0.0	19.0	22.2	13.3	10.0	0.0	7.1
Important / good	331.8	40.0	100.0	57.1	22.2	66.7	40.0	0.0	14.3
Important / neither good/ nor not good	4.5	0.0	0.0	23.8	55.6	20.0	50.0	75.0	78.6
Neither important nor not important/ Very good	53.8	0.0	50.0	0.0	14.3	16.7	0.0	9.1	7.7
Neither important nor not important/ good	46.2	100.0	25.0	73.3	57.1	50.0	33.3	18.2	15.4
Neither important nor not important/ neither good/ nor not good	0.0	0.0	25.0	26.7	28.6	33.3	66.7	72.7	76.9
Interests	Y8 χ^2 p = .001			Y9 χ^2 p = .026			Y10 χ^2 p = .001		

Very important/ Very good	68.0	50.0	33.3	16.7	20.7	17.4	0.0	0.0	0.0
Very important / good	32.0	50.0	50.0	55.6	41.4	56.5	66.7	50.0	15.0
Very important / neither good/ nor not good	0.0	0.0	16.7	27.8	37.9	26.1	33.3	50.0	85.00
Important/ Very good	41.2	75.0	0.0	5.3	0.0	8.3	9.1	9.1	14.3
Important / good	52.9	25.0	80.0	73.7	71.4	58.3	18.2	0.0	14.3
Important / neither good/ nor not good	5.9	0.0	20.0	21.1	28.6	33.3	72.7	90.9	71.4
Neither important nor not important/ Very good	100.0		100.0	0.0	100.0	0.0	100.0		0.0
Neither important nor not important/ good	0.0	57.1	0.0	100.0	15.8	100.0		4.2	100.0
Neither important nor not important/ neither good/ nor not good		42.9			44.7		100.0	25.0	
Work load in subject		Y8 χ^2 p= .001		Y9 χ^2 p= .323		Y10 χ^2 p= .667			
Very important/ Very good	44.0	50.0	0.0	0.0	0.0	14.3	0.0	0.0	20.0
Very important / good	55.6	50.0	100.0	100.0	100.0	42.9	0.0	33.3	20.0
Very important / neither good/ nor not good	0.0	0.0	0.0	0.0	0.0	42.9	100.0	66.7	60.0
Important/ Very good	53.3	50.0	0.0	15.0	30.8	13.3	14.3	0.0	0.0
Important / good	40.0	50.0	100.0	55.0	46.2	66.7	42.9	22.2	18.8
Important / neither good/ nor not good	6.7	0.0	0.0	30.0	23.1	20.0	42.9	77.8	81.3
Neither important nor not important/ Very good	71.4	57.1	40.0	7.1	11.8	10.0	37.5	9.1	10.0
Neither important nor not important/ good	28.6	42.9	40.0	71.4	35.3	50.0	37.5	18.2	0.0
Neither important nor not important/ neither good/ nor not good	0.0	0.0	20.0	21.4	52.9	40.0	62.5	72.7	90.0
Course content		Y8 χ^2 p= .046		Y9 χ^2 p= .115		Y10 χ^2 p= .328			
Very important/ Very good	45.5	75.0	0.0	42.9	42.9	11.1	0.0	0.0	0.0
Very important / good	45.5	25.0	66.7	28.6	42.9	55.6	0.0	40.0	16.7
Very important / neither good/ nor not good	9.1	0.0	33.3	28.6	14.3	33.3	100.0	60.0	83.3
Important/ Very good	65.2	66.7	14.3	0.0	11.1	13.0	25.0	0.0	12.5

Important / good	34.8	33.3	71.4	84.0	44.4	56.5	75.0	30.8	12.5
Important / neither good/ nor not good	0.0	0.0	14.3	16.0	44.4	30.4	0.0	69.2	75.0
Neither important nor not important/ Very good	50.0	25.0	100.0	16.7	8.3	25.0	0.0	20.0	0.0
Neither important nor not important/ good	50.0	75.0	0.0	33.3	50.0	50.0	33.3	0.0	0.0
Neither important nor not important/ neither good/ nor not good	0.0	0.0	0.0	50.0	41.7	25.0	66.7	80.0	100.0
Leads to future studies	Y8 χ^2 p = .001		Y9 χ^2 p = .040		Y10 χ^2 p = .104				
Very important/ Very good	59.1	42.9	33.3	21.4	30.8	7.7	0.0	0.0	9.1
Very important / good	36.4	57.1	33.3	50.0	46.2	61.5	25.0	33.3	18.2
Very important / neither good/ nor not good	4.5	0.0	33.3	28.6	23.1	30.8	75.0	66.7	72.7
Important/ Very good	60.0	66.7	0.0	5.6	11.8	15.8	14.3	11.1	6.3
Important / good	40.0	33.3	100.0	83.3	41.2	57.9	28.6	22.2	0.0
Important / neither good/ nor not good	0.0	0.0	0.0	11.1	47.1	26.3	57.1	66.7	93.8
Neither important nor not important/ Very good	50.0	100.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0
Neither important nor not important/ good	50.0	0.0	50.0	50.0	50.0	33.3	100.0	20.0	37.5
Neither important nor not important/ neither good/ nor not good	0.0	0.0	0.0	50.0	50.0	66.7	0.0	80.0	62.5
Having a range of subjects	Y8 χ^2 p = .016		Y9 χ^2 p = .115		Y10 χ^2 p = .059				
Very important/ Very good	56.3	20.0		14.3	37.5		0.0	0.0	
Very important / good	443.8	80.0	100.0	57.1	50.0	62.5	33.3	40.0	12.5
Very important / neither good/ nor not good	0.0	0.0	0.0	28.6	12.5	37.5	66.7	60.0	87.5
Important/ Very good	52.6	83.3	0.0	11.1	20.0	15.0	11.1	0.0	7.7
Important / good	42.1	16.7	83.3	72.2	40.0	50.0	33.3	72.7	7.7
Important / neither good/ nor not good	5.3	0.0	16.7	16.7	40.0	35.0	55.6	72.7	84.6
Neither important nor not important/ Very good	71.4	66.7	50.0	9.1	0.0	14.3	0.0	20.0	9.1
Neither important nor not important/ good	28.6	33.3	25.0	54.5	38.5	71.4	33.3	0.0	18.2

Neither important nor not important/ neither good/ nor not good	0.0	0.0	25.0	36.4	61.5	14.3	66.7	80.0	72.7
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