STUDENT PERCEPTIONS OF SUBJECT SELECTION: LONGITUDINAL PERSPECTIVES FROM QUEENSLAND SCHOOLS

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Abstract

Previous investigations into career and subject selection have provided insights into the range of influences on such choices. However, few studies have been carried out focussing on the process and context over time in which students make decisions about school subjects, post-school courses and careers. The current research initiated by the Tertiary Entrance Procedures Authority (TEPA) addresses similar issues from a student's perspective, over a four-year time period. This project aims to identify the impact of school policies and practices on students as well as other influences which affect individual subject choices and career decisions. It was anticipated that further insight into these processes and procedures will be gained by the use of a qualitative research methodology. In addition, this project was designed to evaluate from the students perspective the usefulness of information given at times of decision making and factors that facilitate or hinder their post school choices. Themes relating to subject selection for senior school have been identified after preliminary analyses of the extensive qualitative data obtained from the first three phases of the project. Implications for educational theory and policy at a school level will be discussed in light of these initial findings.

1: Introduction

Students become increasingly aware of career opportunities and the availability of vocational pathways during their final years of senior schooling (Harvey, 1984). Starting in Year 10 when decisions have to be made in relation to subject selection for senior school, choices must be made that influence future career opportunities and aspirations. While many career theorists caution against making early decisions in relation to careers, institutional and societal constraints often require that a choice be made by students when they are still relatively young (e.g. Watson & Stead, 1994). Transition or crisis points are thus forced, in many cases prematurely by the educational system despite the fact that many students have not made a firm decision about their post-school careers.

A number of studies have explored issues relating to indecision about future careers and the impact this can have on choices relating to post-compulsory study. Vondracek, Hostetler, Schulenberg and Shimizu (1990) stated that career indecision should be recognised as a normal stage in the career development process. Indecision may result from an inability to regard any careers viable, difficulties choosing between too many occupations or problems deciding on alternatives when the most preferred option is not a realistic possibility. In light of this, career guidance which emphasises the identification of a goal and the systematic progression towards that goal fails to recognise appropriate changes of mind that can accompany increased vocational maturity (Hodkinson & Sparkes, 1993). In Australia it is often the case that students

are asked to identify future study and potential career goals when choosing subjects for senior school. Distribution of information at Year 10 regarding the prerequisite subjects required for tertiary study can contribute to the perception that the ramifications of such decisions are far reaching.

Specifically in relation to subject selection, Siann, Lightbody, Nicholson, Tait and Walsh (1998) observed that the majority of students in their study chose subjects that they liked, facilitated progression to future careers, were compulsory or subjects where there were no other more desirable options. They also found that students tended to make these choices from a narrow viewpoint with a short term focus, often failing to fully consider their options beyond school. In the Australian context, Warton and Cooney (1997) found little evidence that subject choice by school students was a considered, planned exercise. According to their results, 30 per cent of students indicated they had not received an information booklet about subject choice, which had been distributed by all schools in the study. As it was not possible that all these students missed out on the resource, this suggests that the information was not sufficiently salient or valued. Such findings should be considered in light of student reports that they require detailed information when making choices about selecting school subjects. The results also indicated that information about subject choice was gathered inadvertently and largely outside formal channels. Overall, it was concluded that adolescents were thus unlikely to make optimal choices as they lacked sufficient and appropriate vocational information. Interestingly, while many schools provide a range of career-related services and information resources to facilitate the decision making process, only limited research has addressed how useful and meaningful this assistance is for students (Chapman, 1993).

Other investigations have attempted to provide further insights into the influences on career decision making and subject selection (e.g. Sleet & Stern, 1980; Lee & Ekstrom, 1987). Dellar (1994) highlighted the lack of knowledge regarding subject selection issues from the perspective of the individual and the actual nature of the decisions that are made at this time. Australian studies (e.g. Ainley, Robinson, Harvey-Beavis, Elsworth & Fleming, 1994) have identified a range of external factors which constrain subject selection including diminished subject availability, limited timeframe for subject selection, timetabling restrictions, compulsory subjects, tertiary prerequisites, and eligibility for entry to tertiary courses. Internal issues such as locus of control, self-assessment of ability, vocational awareness, gender and interest in the subjects offered also appear to affect the manner in which students choose subjects (Ainley et al., 1994). Dellar (1994) also found that, with regard to obtaining relevant information, students appeared to access informal channels such as parents and siblings, rather than career education or counselling resources available within the school.

The Tertiary Entrance Procedures Authority (TEPA) initiated the current longitudinal study in 1995 to identify the impact of school policies and practices on students as well as other influences that affect individual subject choices and career decisions. This project aims to evaluate, from the students   perspective, the usefulness of information and advice given at times of decision making and factors which facilitate or hinder their post-school choices. The research also seeks to gain an additional insight into these processes and procedures through the use of a qualitative research methodology in order to access the views of students directly. One of the intended outcomes of the study is to improve the use and effectiveness of information and publications given by the schools and TEPA in order to assist students

decision making processes.

2: The Project

During the latter half of 1995, seven schools were approached to participate in the TEPA longitudinal study. As shown in Table 1, the type and location of the schools is broadly representative of the full range of schools in the Queensland senior secondary system. After the initial phase of the investigation, a Catholic systemic school was included in the subsequent interview rounds to ensure that the views of this particular student group were also included in the study.

Table 1. School type and location.

SCHOOL	TYPE	LOCATION	TOTAL STUDENTS AT SCHOOL
Government secondary	co-educational	suburban	800
Government secondary	co-educational	regional	650
Government secondary	co-educational	regional (remote)	400
Government P 12	co-educational	regional (isolated)	300
Catholic systemic	co-educational	suburban	600
Independent	co-educational	regional	400
Independent	single sex male	inner city	1000
Independent	single sex female	regional	900

A project coordinator and local researchers conducted the first round of focus groups in early 1996. This initial contact with the schools and students was developed as a pilot phase of the project with the intention of establishing a productive working alliance with those involved in the study. The information collected also facilitated identification of relevant issues in order to provide a tentative framework for the planned second round of focus groups.

In 1997, the focus groups were replaced with a semi-structured, individual interview program to facilitate a more systematic approach to the data collection process.

School backgrounds

Central coast public high school

This is a recently established school, with approximately 650 students in Years 8 to 12 and a teaching staff of 50. The school curriculum includes a range of Board and Board-registered subjects. The guidance officer's role includes subject selection, careers advice, tertiary study information and study skills advice as well as personal counselling. Career education programs are in place in a number of subjects at this school. Career and further education information is also available to students as part of careers days, parent information evenings, work experience, and subject selection sessions.

Rural isolated school

This rural school caters for children from Preschool to Year 12, and offers school, Board and TAFE accredited subjects to Year 12. Currently, approximately 300 children attend the school that has a staff of fewer than 30 teachers. The school is visited fortnightly by a Guidance Officer who provides careers and subject selection advice to students. One teacher is allocated to coordinate careers and further education material sent to the school. In addition, a vocational camp is conducted annually for Year 12 students to visit workplaces and tertiary institutions of their choice.

Suburban public high school

This relatively new suburban public high school situated in the inner suburbs of Brisbane has approximately 800 students enrolled from Years 8 to 12. The school has a Guidance Officer whose major role in the school is to provide advice regarding career and subject choice. Students receive subject selection information over a four-week period in class time according to subject area. Materials distributed include a future options sheet, CES career guide, Tracks, and OP and FP information sheets. The school also produces subject information pamphlets that inform students of what they are likely to learn, expected methods of teaching, required time commitment, prerequisites, assessment, and possible future benefits of the course.

Provincial independent single sex school

Opened as one of Queensland's first secondary schools, this independent, fee-paying school caters for approximately 900 girls in a provincial city. A Student Counsellor, Careers Room and the following resources are at the students' disposal: computer software to explore interests, courses and jobs, Job Guide books, videos, university/TAFE handbooks, and Works Skills texts. Students also take part in a Life Skills subject, a school Careers Day, Freeman Testing, preparation for the Core Skills Test, and a variety of class activities centred on assisting the students in choosing a career.

Central Queensland public high school

Opened less than three decades ago, this school has a population of approximately 400 and is situated in the Central Queensland region. Programs available include Board subjects and Board-registered subjects which incorporate vocational education units and work placements for post-compulsory senior students. The Guidance Counsellor works between the high schools

while the position of Careers Adviser is a voluntary one open to the school s teaching staff and chiefly involves handing out literature on request. Career Education programs in which students participate include careers markets, parent information evenings, life skills, and subject selection sessions.

Coastal north independent school

This school on the coast of North Queensland has approximately 400 students in Years 8 to 12. In Years 11 and 12 core subjects are reduced to three: Christian Education, English and Mathematics. Subject choices appear to be primarily academic. A number of student support services are available including English as a Second Language (ESL) courses, learning and support assistance, and a program for gifted and talented students. A laptop computer program provides computers to all students on lease from the school.

Coastal Catholic college

This Catholic systemic school is situated on the outskirts of a major tourist region. Years 11 and 12 students choose from Board and Board-registered subjects. The school offers quite an extensive selection of vocationally-oriented subjects, and has programs operating which have been designed to help non-academic students gain secondary qualifications and find work after Year 12. The school counsellor is both counsellor and careers adviser. Other staff also have responsibility for aspects of student career education, including assisting in preparing students for the QCS Test. Parent teacher evenings are held for students going into Year 11 and their parents.

Suburban independent single sex high school

This independent boy s school is a day and boarding school catering for Years 4 to 12, with approximately 1000 students and 100 teachers in 12 subject areas. Subjects available suggest a mix of academic and non-academic students, although the school is primarily geared towards academic subjects. The school has a Guidance Officer and an assistant to the Guidance Officer providing both personal and careers counselling with individual sessions regarding subject selection. Materials distributed to students in Year 10 include an Academic Handbook outlining subjects available and course selection advice. Subject selection talks and careers nights are held.

METHOD

Table 2 provides an outline of the project across all phases, detailing the methodology used and the purpose of each stage of investigation.

Table 2. Research timeline and purpose.

Year	Phase	Methodology	Purpose

1995			• Establishment of contact with participating schools. • Development of project brief.
1996	Phase 1	Observations	• Identification of career and study issues relevant to individual schools.
		Focus groups	• Establishment of peer-based discussion groups.
1997	Phase 2	Observations	• Identification of school programs relevant to subject selection and career issues.
		Focus groups	• Exploration of issues relating to career decision making and subject selection.
	Phase 3	Individual interviews	• Focus on subject selection and career decision making from the perspective of the individual.
1998	Phase 4	Individual interviews	• Acquisition of student views at the conclusion of secondary studies.
		Surveys	• Provision of context for interview data.
1999	Phase 5	Individual interviews	• Collection of student perceptions regarding tertiary entrance and post-school options.

Data Collection Process

As the initial phase of the investigation was primarily intended to introduce students to the concept of talking about tertiary pathways and career-related decisions, questions were generated by the researcher in response to topics raised by individual focus groups. Discussions centred around school resources which were perceived by students to be helpful or unhelpful in facilitating choice of school subjects and career options, as well as a range of additional influences which impacted on subject choice, tertiary course options, and career decisions.

In the second phase of the study, discussion topics were developed based on the themes that emerged from the student focus groups. Areas covered related to the subject selection process, assistance with subject selection, careers events, and information provided by the school.

After completing two rounds of group discussions, it was decided that the experiences of individual students should be the focus during the next phase of the study. A semi-structured interview schedule was developed by the research team with the aim of addressing issues relating to information provided about school subjects, tertiary pathways options, factors which influenced student decision making, the perceived usefulness of school subjects, and future career plans.

Procedure

Throughout 1996 and 1997 class observations, at times convenient to schools, were an additional strategy employed to enhance information gathered.

Phase 1 (Semester 1, 1996   Year 10 students)

Each class participating in the study was divided into self-selecting friendship groups of approximately two to five members, with the most common grouping consisting of four students. Discussions lasted the length of a school period that, typically, was around 40 minutes.

Phase 2 (Semester 2, 1996   Year 10 students)

During the latter half of 1996, students were again involved in a focus group situation targeted at a time when decisions were being made in relation to subject selection for Years 11 and 12. Student absences and relocation of students in conjunction with changes to friendship groupings resulted in membership of groups varying somewhat during this phase of group discussions. Researchers encouraged all students to participate in group discussions of the topics. As was the case in the previous phase, the length of the focus groups was limited to approximately 40 minutes.

Phase 3 (Semester 2, 1997   Year 11 students)

Early in second semester, school personnel were contacted to arrange individual student interviews. The majority of schools scheduled the interview program over a period of one or two days, resulting in a time limit of 20 minutes per interview. In some cases, researchers adopted an alternative strategy of permitting students the option to discuss topic areas, rather than asking the full schedule of questions.

Participants

As can be seen from Figure 1, the number of participants increased during the second phase of the investigation due to the inclusion of an additional school. The original number of students involved in the study was 164. Of the 187 students at the eight schools who were part of the second phase, 157 (84%) also completed the individual interviews in the third phase.

Figure 1. Number of students participating in the study.
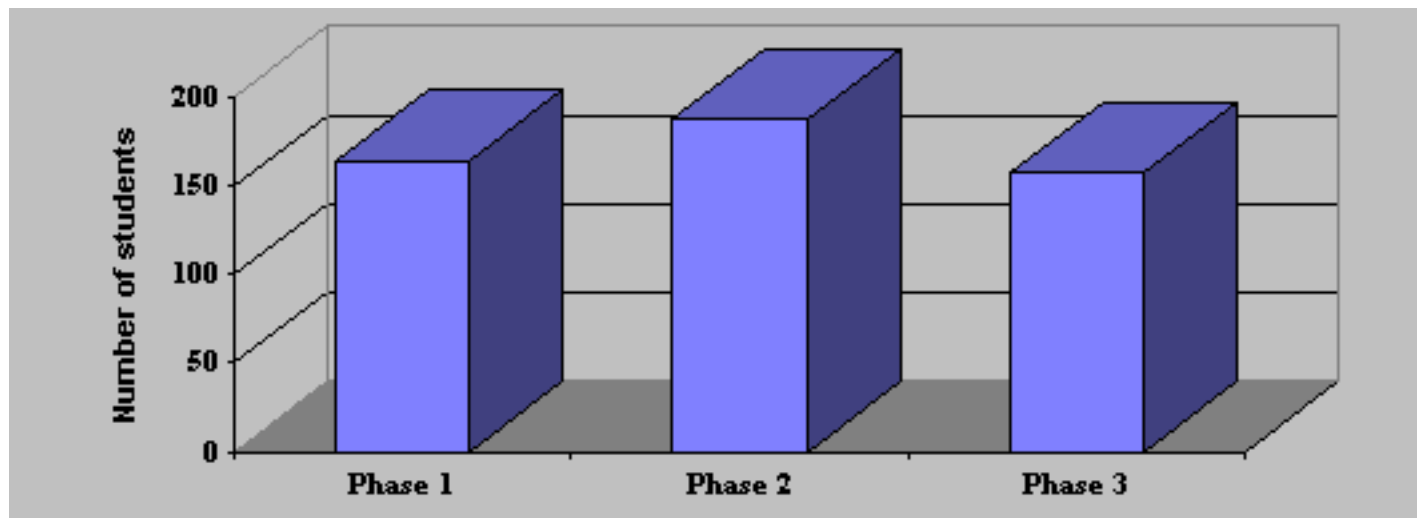
3: Preliminary findings

From the data collected during the three completed phases of the research, the interaction of personal, social, and socio-political factors appeared to influence how the students made decisions regarding subject selection. As this paper is intended as an interim report building on previous work, the focus will be primarily on the last round (phase three) of investigation. However, some comment will also be made on significant findings from the earlier phases of the study. Firstly, the main themes relating to personal factors consisted of the students self-assessment of their academic ability, level of interest and need for subjects for post-school courses and career pathways. Secondly, social themes included factors relating to their family and social networks as well as their educational experiences. Lastly, the socio-political environment of the community in which the students and the schools are located also appeared to impact on the students   decision making processes.

Personal factors

Consistent themes were expressed by students across all three phases when discussing how they chose their subjects or would advise others how to select subjects for Years 11 and 12. These themes included an assessment of whether or not they were "good at" the subject, were "interested" in the area and enjoyed the content and method of teaching, and whether or not they needed the subject as "pre-requisites" for post-school courses and careers. This criterion was not only used for selection of subjects for Years 11 and 12 but had been used in the past when choosing areas of study at school.

Throughout the preliminary phases of the study it was noted that very few students had a clear idea of career or course pathways and were experimenting with possibilities, an approach that was also evident in the third phase. The following excerpt illustrates the typical process of considering options and the range of factors that are taken into account when selecting subjects.

> *... cause my sister was in Year 12 and so she had the Job Guide book and so I used to look through it and read all about it and stuff and I thought forensic science was really interesting, but I'm hopeless at science, I know that that would never come about, and I also wanted to be a nurse, but also I'm not that. I'm not good at science so that wouldn't help me either, but yeah. And I also wanted to be a graphic artist but then I went on work experience as one and then I realised, "No, I don't want to do that either," because I thought it would be working by hand, but it's all on computers and it's really boring. You just sit in a little back office all day in front of a computer. (Phase 3)*

Particularly in the second round, others, while choosing subjects they were "interested in", "good at" and "enjoyed", also wished to keep their "options open" to maximise their choice of course or career pathways on completing Year 12.

> *I really enjoy Biology actually except that I get good marks in like class essays and that, like I top the grade, but I bomb out in exams some times. But I still enjoy doing Biology cause it's I like Music a lot and it s not hard to get good marks. (Phase 3) (a)*

The criteria used by students to select their subjects, as reported in the first two phases, were further illustrated in the Year 11 interviews (third phase) when attitudes towards their chosen subjects were discussed.

> *Chemistry is just really easy to understand like compared to Physics. Like the text book is really and like once you say I'm behind in class I can just read the section, do the questions and I'll understand it, whereas in Physics if I m behind I'm behind, I just can't catch up with that, and History because it's one of the easiest of my subjects and everything is just straightforward. (Phase 3) (b)*

They reported that their "best liked" or "favourite" subjects were those which they could "do"; found "fun and enjoyable"; "interesting"; relevant for their "future course, work or career"; and for "general knowledge". Students linked: (a) good marks with enjoyment; (b) easiness of the subject with understanding; and (c) interest with usefulness of the subject for future courses and work opportunities, as illustrated by the accompanying quotations.

> *I like Japanese, that's my favourite subject. As for that because when I leave school I want to work, I want to go I've just come back from an exchange over there and I want to work over there for a couple of years teaching English over there before I work for my father in his business and I might even work in other firms before that doing after I go this is after I go to uni. (Phase 3) (c)*

The evaluations relating to the "best liked" subjects were similar to the reasons given to assess their "most useful" subjects. The subjects that were deemed to be "most useful" were classified as those which would help in their future work, course or career and to enhance their general skills.

> *I don't really like English this year, it's a lot different... in English now we're doing like colours and what colours mean and I don't I think that's really strange so it's I don't really like that much. ... Well, in English all the other years we've done like a variety like media and, I don't know, poetry and stuff like that and this year we haven't done any of it, like we've hardly done anything, so I thought we'd be doing stuff like that& (Phase 3)*

Alternatively, students reported that the "least liked" subjects were those which they found "too hard", "difficult to understand" and those in which they "were not doing well". A wide range of subjects was mentioned such as mathematics, biology, HPE, science, English, music, and art. Students reported a number of reasons for their lack of enjoyment of the subjects: the expected standard was "too high"; they were "not interested"; they "did not understand explanations given by the teachers"; and the content was "not what they expected". In many cases, students offered more than one reason for not liking the subject and there was significant overlapping of the above categories. It was also commented by a small number of students that there was no subject they disliked.

> *Biology, again cause it's not what I expected and I expected something a bit better and I don't think the teacher's a good teacher and I don't really get along with him much and I'm not just saying that cause I don't get along with him, a lot of people say he doesn't explain thoroughly enough or that. (Phase 3)*

Some students reported also that the subjects that they liked the least were irrelevant to their future, were "boring", and were not related to "real life". These last two reasons were associated also with the students assessment of those subjects which they assessed as "least useful". While students appreciated they had little option in relation to compulsory subjects, many could not see the value of such studies in their senior years.

> *Oh yeah, and Religion cause it's really heavy and like emotional and it's really heavy going and I don't think I should be wasting my time on religion. (Phase 3)*

However, the majority of students who participated in the individual interviews felt that all the subjects they had chosen were useful to some degree. A small number indicated they believed certain subjects to be least useful, but had taken them anyway out of personal interest and not to enhance future career or course opportunities.

> *Well, Film and Television I did that because I'm interested in that, but I don't think it will benefit me much in any way, like I don't think I'll be in the film and TV industry, but I do that for interest sake and that's really good. Most of the other ones are just general knowledge. Like Geography, I don't think I'll get into Geography, but like that interests me... (Phase 3)*

The students emphasised that they selected subjects that they were good at and this criterion equated with the advice given within the schools and in TEPA and Board of Senior Secondary School Studies (BSSSS) publications on subject selection. While the minority of students who had some career direction linked enjoyment of the subject and good marks to future interest in course and career pathways, those with little direction focussed on choosing subjects which

kept their options open and where they gained good marks.

Social factors

Social factors noted to impact on students	choice of subjects, post-school courses and career pathways across all three phases included family members, social networks, and the school environment. While a small number of students did not acknowledge these influences as part of the focus groups and interviews, others reported that family, friends and teachers had influenced their choices to varying degrees.

As part of the initial focus groups, a large minority of students reported that their parents wanted them to progress to further education because their parents had been to university, other siblings were at university, and some parents believed that additional study would improve their children	s job prospects. While some students felt their parents	expectations were too high, a significant number of these students were planning further education in line with their parents	expectations. The majority of students in the third phase, however, reported that their families were supportive and helpful when they were selecting their subjects and also in suggesting careers. It was also the case that most felt that their parents supported them in whatever they decided to do. The parents and the majority of students believed that if they stayed at school until Year 12 this would enable them to gain employment and/or entrance to further education, thus increasing their skills in the labour market.

Influence of friends

There was a consensus that friends were not the ideal people to influence the selection of subjects. However, students did state that having friends in the same class was of help as they were supportive. It was agreed also that friends were useful when discussing options and to support you while you made decisions. Friends were seen as more likely to know you better than teachers and, therefore, could suggest careers which would suit your personality. This attitude perhaps illustrates the acceptance of the advice given through the schools	not to choose subjects just because of friendships.

References to friends	input was more limited during the third phase of the investigation and was more likely to relate to acquiring information about future careers than subject selection. The following quotation highlights the almost incidental manner in which students clarify their ideas about post-school options.

I have a friend, my next door neighbour's daughter, she's in the Police Force and she was saying about getting into that and the academy here and that sounds pretty interesting... (Phase 3)

Extra-curricular experiences

During the initial phases of the study, those students who were involved in extra-curricular activities reported that these pursuits had widened their horizons and extended their ideas about careers or post-school pathway options. These pursuits included reading novels, watching television, attending drama, art and music classes, being employed in part-time jobs,

holidays, and work experience. Fewer students referred to the influence of extra-curricular activities in the third round, possibly due to the fact that direct questions were not asked on this topic.

Students involved in the initial focus groups mentioned reading books such as Hot Zone, Patricia Cornwell s novels about forensic science, watching television shows such as Chicago Hope and LA Law and holidaying with a forest ranger as being influential in deciding on areas of interest for a future career. These pursuits had, therefore, broadened their interests and given insight into the types of careers they might choose.

Work experience for the most part was reported to have resulted in students rejecting or reconsidering an employment or career direction, an occurrence which was again commented on during the third phase. The majority of students in the focus groups saw a direct correlation between their part-time jobs or leisure pursuits and future employment opportunities. They believed that including this type of experience in their curriculum vitae would help them in the labour market. Thus extra-curricular experiences appeared to encourage wider interests and hence resulted in the consideration of a range of different career options as well as preparing them for future employment.

School environment

By the second round of group interviews all the schools had provided information to students using a number of formal and informal methods including publications and videos, career talks, subject selections talks, parents information evenings, school excursions to university, attendance at open days, and career exhibitions.

In all three phases of the study the students talked about the school resources which they found varyingly helpful in the subject selection process. The emphasis on these issues, however, changed during the course of the longitudinal study. In the third phase, as the students commenced their courses, the majority of students were satisfied with the help and advice they had received from their schools. As part of the individual interviews a large minority of students indicated that they had not difficulties when selecting their subjects and many also felt that, in retrospect, the information and assistance they had received was sufficient. However, when asked specifically about certain resources, some students put forward some general suggestions which they felt would improve the subject selection procedure.

Publications

All students had received or were able to access a wide variety of literature relating to courses and careers published by the Queensland Tertiary Admissions Centre (QTAC) Ltd, TEPA and other relevant bodies. While in the first and second focus group rounds all students reported that they had either sighted them or knew they were available, only a minority of students had actually read them. During the third phase students appeared to be motivated to seek out the information and were more likely to have a general idea about their futures and to link career pathways to subject selection.

School personnel

All schools had either a guidance officer or teacher whose duties included career guidance. While the majority of students who mentioned that they had seen the guidance officer found this helpful, a minority reported that they had gained little useful advice. Again, those students who had some idea about their direction appeared to gain more from their meeting with guidance officers than those who had little idea of their futures. Comments made by students during the third round in relation to the guidance officer were frequently positive, with a much smaller number suggesting that they were unhelpful. Some students also mentioned that the lack of explicit linkage between school subjects and career pathways was a disadvantage when attempting to select subjects.

> *...with a lot of like in careers search and we did computer programs and booklets and things so I think that helps a lot. (GO) he offers careers advice if people want to book an interview with him so the school does quite a bit in that regard so, yeah, whatever you want to go into, it's good. ...the difficulties of how people got in and the jobs which came out and the engineering sector... (Phase 3)*

While students who knew which courses they wanted to do in further education consulted the QTAC book, they perceived there to be little relationship between their current subjects and future courses. Students expressed that, while career books informed them about subject areas, at times, these were not specific about appropriate subject options in Years 11 and 12. There was an expressed need for more career information linked to subject selection and tertiary pathways.

All schools had provided their students with talks on subject content by Heads of Department and course teachers. While most of the students reported that these had been helpful, some issues with regard to the limited timeframes, a selling bias on certain subjects, and a need to link subjects to types of careers were mentioned. While in some schools Years 11 and 12 students had assisted with talks to help the Year 10s select subjects, other schools had suggested Years 10s approach them informally. The students agreed that this was a good idea, but the students reported that it was difficult if you "didn t know them".

A further suggestion made by some of the respondents was that they should be allowed to join in a Year 11 class to see what the content was like before they chose the subjects. This was especially requested in subjects which were not offered before Year 10 by students who, in the third round of interviews, had dropped or exchanged a subject which they had found "too hard" or not what they "expected".

> *Yeah. I'm doing HPE, Legal, Biology and IPT now. I was doing BOM, but I changed out of it because it was pretty boring. But IPT is really hard. It's not what I thought it would be. I thought it would be like computers, like you know making showing you how to use programs and like Internet sort of things and that, but it's just making little program things with codes and it's really confusing. So I thought about changing back to BOM, but it's got a higher weighting so if you get a low mark in that it's still weighted higher than sort of an average mark in BOM so I'll just stay with it. (Phase 3)*

Factors that constrained subject selection

While most students felt satisfied with their chosen senior subjects, there were a number of

factors reported to have limited their selection of subjects. These limiting factors included the timetabling of the line or block structures, academic standards imposed by some schools, the short time span, too few choices, and, due to lack of popularity, insufficient students to offer the subject.

However, the main limitation that students reported with regard to their subject selection process, across all phases of the research, was the line or block structure which schools used to timetable classes. While those students who were taking pre-requisite subjects for entrance to tertiary courses were satisfied by and large, those who had no specific study or career direction in mind and were choosing those subjects which they "liked" and "enjoyed" appeared to be the most dissatisfied.

A number of students experienced difficulty during the selection process when deciding on subjects because they clashed with other choices, resulting in the criteria of taking subjects they liked, were good at, or what they were interested in becoming compromised. While a number of students had considered changing subjects early in Year 11, school timetabling constraints were perceived to make this difficult.

The ramifications of the previously outlined limiting factors appeared to be that a number of students had considered changing their subjects in Year 11, although only a minority had subsequently altered their choices. These students had either reduced the number of subjects taken or were attempting to catch up in a chosen alternative. Most of those who had considered changing to another subject, but had not, reported the line structure offered them no viable alternatives and it was too late to alter their choices.

> *I was thinking of changing out of Speech and Drama into well, the only things I could think of to change into were BOM, which I'm already doing, or IPT and so I'm not going, I'll just stick with it. (Phase 3)*

In the third phase of interviews the majority of students reported that they were "satisfied" with their selected subjects. However, a number had considered changing subjects because they were "failing", they found the subject "boring", the approach of the teacher to the subject matter was "confusing", or the content was "not what they had expected".

Environmental factors

The schools that were chosen for the study were located in a range of geographical areas across the state. The location of the school in a specific community impacted on the students selection of subjects and their perception of the labour market. Students from a school located in a rural setting discussed the impact of the location on their opportunities, not only in the range of subjects offered, but also opportunities for further education and employment. In comparison, students living in larger centres did not express these concerns. Overall, students from regional areas were more likely to mention that they were dissatisfied with the subjects they had chosen. The major reasons offered for this dissatisfaction related to the line structure and the limited number of subjects offered.

Schools located in rural or remote areas also experienced a range of staffing difficulties. The continuous turnover of staff appeared to impact directly on the subjects being offered in the school. Geographic location was perceived to be detrimental to attracting long-term staff by students participating in the focus groups. The rurality and the socioeconomic status of the region were regarded as disadvantaging students as far as future employment and further educational opportunities were concerned. However, by the third phase of the study, geographic location was rarely mentioned directly by students as a limiting factor.

The students in more remote locations also believed they were disadvantaged as far as attending university open days and career exhibitions. These rural students and students in other centres outside the capital city also reported feeling that most of the further education and career opportunities were in the larger cities. During the individual interviews, students were asked to indicate whether there were any additional information sources they would like to be able to access regarding subject selection and careers. Interestingly, few students in remote or regional areas specifically mentioned that it would be worthwhile to attend careers days, visit tertiary institutions or request presentations from school visitors.

Career opportunities related to gender

In the present climate where issues of gender equity and social justice are important concerns in the socio-political context, the students   ideas about careers illustrate some merging of traditional gendered careers while other careers types tended to continue to be gender-specific. Issues relating to careers appeared to be most evident during the third phase of the investigation.

> &there's like a limitation on the school's subjects here because a lot of other schools do marine studies and outdoor education and that's sort of like what I like. I don't like being inside. I don't think I don't want to be in an office like as my occupation. I want to be outside either teaching kids phys. ed. or like something to do with animals or marine life and I would have loved to do marine studies and, yeah, stuff outdoor education or anything like that, but they didn't have any of it so I couldn't take it, and yeah. (Phase 3)

The Holland (1985) career types were used to classify the ideas students had regarding to career choices which, in a number of cases, covered more than one category. It was interesting to note that both male and female students   career choices centred on the investigative and artistic categories. However, while the majority of males were within these two categories, the majority of females expressed a wish to take up careers in the social area.

> Yeah, I guess it depends [inaudible] get too, but if I like I'll do my performance course, but then if I'm not getting work and stuff then I'll go back and do I was thinking maybe I'd become a police person, just on the side. And which all ties in with law, as well, so maybe I'd do a law degree and then decide whether I want to be a lawyer or a police officer or... (Phase 3, Female)

The rejection of conventional occupations illustrates the students   expressed need to be outside and active. The subsequent focus on investigative and artistic areas was seen in both

male and female students.

> *Career thinking? I was thinking along the lines of business management or real estate, something like that, that's because I just thought of doing that. Anyway, just I don't know, I like that sort of thing, that area, cause I don't really want to be a tradesman and I don't really like science subjects or anything so I thought that would be all right cause my dad does a bit of he's a solicitor so I thought legal business or something might be pretty good, so I just based my subjects around sort of that area. (Phase 3, Male)*

Where male and females chose occupations with similar characteristics they appeared not to consider them as gender-specific. In enterprising and the social categories more women in the latter and more men in the former appeared to perceive these types of jobs as gender-specific. Females tended to discuss jobs which
emphasised relationships and interaction with people such as child care and teaching. In contrast, males in this category tended to choose occupations in hospitality and catering, as well as teaching.

> *Career thinking. Well, I'm thinking of going into the hospitality industry or tourism and that's an air either an air steward or in the hotel industry cause I can speak several languages, three, and I can if I can't get a job here or if I do they could ship me overseas to Europe cause there's heaps of countries that speak Swiss, English and German there. (Phase 3)*

The community-based issues reported to have influenced and impacted on subject selection and perceptions of post-school course and career pathways can be seen to constrain as well as facilitate students   choices. While the rural/urban divide can be seen to limit students who live in remote communities, this factor does not appear to influence the perception of male or female career choices. The mix of gender-specific and non-gender-specific occupational choices did not differ according to the location of the school.

> *Yeah, I always liked child care and that, but I've decided like I want to be like a live-in nanny like on a on like a cruise ship or something. (Phase 3)*

4: Discussion

These preliminary findings confirm the myriad of influences on students   decision making and highlight their importance as further choices are made regarding study and career options. The initial results also suggest that student perceptions and satisfaction with issues relating to subject selection may alter substantially over time. For example, in the third phase of the study, most students, in contrast to previous phases, were largely satisfied with their chosen subjects. It is likely that further changes will be observed in the latter part of the research.

Constraints experienced by students when selecting subjects that have been identified by past research were again evident in the current project. Difficulties were reported in relation to limited subject offerings, timetabling and the short timeframes available to make decisions,

although the impact of such constraints appeared to lessen over time.

Interviews conducted with students during their final year at school will provide further insight into perceptions of subject selection and their effect on decisions regarding post-school options and career decisions. On completion of senior school, these students will be contacted to discuss matters relating to future career and study plans. Issues relating to satisfaction with subjects, the extent to which subject content was expected, whether, in retrospect, changes should have been made to programs of studies and the perceived influences on decisions about subject choice will be reflected on as part of the final phases of the study. Additional data will also be gathered in relation to career and future study aspirations and the services and information valued by students when making such choices.

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