UNIVERSITY OF SOUTHERN QUEENSLAND

Transition to university: managing constraints and successfully persisting with study on a pathway program.

A Thesis submitted by

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Abstract

Pathway to university programs like USQ's Tertiary Preparation Program (TPP) have a significant role to play in widening participation in higher education in Australia as they prepare students from targeted equity groups that have previously been disadvantaged in terms of access to university. While access to higher education has improved for some equity groups, a continuing concern for stakeholders is the perceived rate of attrition in pathway programs. Statistical measurements of attrition and retention may provide tools for evaluating program successes and failures, but they do little to inform policy makers about the student experience of study. The purpose of this study is to identify TPP students' experience of constraints to successful persistence with study and how they manage to overcome them and achieve their learning goals. A qualitative dominant mixed methods research design was utilised to investigate the students' experience of studying on the program. The main data was generated through analysis of student assignments completed at different points of program progression and semi-structured interviews upon completion. Findings are discussed utilising the conceptual framework of Bourdieu's social reproduction theory to discuss constraints as forms of capital. The main socioeconomic constraints faced by TPP students relate to time spent in paid and unpaid work which leaves little time available for full time study. The way in which students utilise time available for study, however, reflect cultural constraints. It was found that unrealistic expectations and false beliefs about the nature of tertiary study prior to enrolment compound constraints that reflect lack of familiarity with academic practices and forms of literacy dominant at university. The process of managing constraints and successfully persisting with study is best conceptualised as development of a personal learning ecology (PLE). Development of a PLE is predicated on students' capacity to successfully manage existing social relationships

and develop new ones. Resources and relationships exist in different contexts and each context requires a different form of communicative competence. Pedagogy in pathway programs must facilitate the building of students' personal capacity by scaffolding activities and instruction that specifically target the communication and interpersonal skills required to build a personal learning ecology.

Certification of Thesis

This thesis is entirely the work of George Morrison except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Student and supervisors signatures of endorsement are held at USQ.

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Chapter 1: Introduction

This chapter introduces the thesis and research conducted as part of a PhD program. The purpose of the research was to examine the lived experience of individuals studying on the USQ Tertiary Preparation Program (TPP). The aim of the research was to explore student perceptions of 'success' on the program and the factors that constrained or facilitated persistence with study. The chapter begins with background to the research and goes on to locate the present study within the wider context of retention on Enabling Programs in Australia. It then goes on to justify the research and assess its contribution to our understanding of the factors that influence persistence in tertiary preparation programs and beyond. The chapter then discusses the philosophical approach and research design. In this study the researcher was also a teacher on the TPP program and therefore the section will also discuss the role of researcher and participants and considers the ethical implications arising from the research design. The chapter concludes with a discussion of the terminology and an outline of the thesis.

1.1. Background to the research

Enabling programs like the TPP have a significant role in widening participation in higher education in Australia as they are primarily focussed on introducing non-traditional students to tertiary study. An important objective of the project to widen participation in higher education is the inclusion of targeted equity groups that have previously been disadvantaged in terms of access to higher education. The Bradley Review of Australian Higher Education (DEEWR 2008) identified certain groups that are traditionally underrepresented at tertiary level, including those from low Socio-Economic Status (SES) backgrounds, Indigenous students and residents of remote and rural areas. These target equity groups have long been a major cohort of the University of Southern Queensland's (USQ) TPP program (Clarke, Bull & Clarke 2004). Other pathway programs in Australian universities are populated with students with similar demographics (Bunn 2009; Cullity 2006; Hodges et al 2013; Muldoon 2011; Muldoon et.al 2009; Muldoon & Wijeyewardene 2013). Thus enabling programs are an important component of 'massification' of higher education in Australia.

By 2020 a significant section of the population in Australia and other OECD countries will have had some experience of study at tertiary level (Johnstone 2010). Enabling programs such as TPP at USQ and the Foundation Program at the University of Newcastle have been established since the mid-nineteen eighties. Since that time other enabling programs have been developed at most Australian universities. According to Hodges et al (2013), Enabling programs differ with respect to entry qualifications, mode of delivery and whether students pay fees or not. TPP is a full time program offered online with on campus support classes for those able to attend. The program is open access and fee free and the success and growth of Enabling programs like TPP has resulted in large numbers of Australians gaining access to university. This means the student experience of studying on programs like TPP will be 'passed on' to future generations enabling them to make informed decisions about whether a university education is a realistic and worthwhile investment. Whether students succeed in attaining their learning goals or not, the experience of studying at university will contribute to the widening pool of cultural and social capital available to future generations. There will be more knowledge about studying at university in common currency.

1.1.1. Statement of the Problem

While access to higher education may have improved for equity groups, a continuing concern for stakeholders is the perceived rate of attrition in both undergraduate and pathway programs. Rates of retention in pathway programs are generally lower than in undergraduate programs, and approximately half of TPP students fail to complete within the time frame allocated by the university (Hodges et al 2013). Government is concerned that targets be met as evidence of widening participation and universities are concerned because of the substantial investments made in measures designed to meet targets. The rate of attrition in pathway programs is viewed by some as a measurement of the success of the widening participation initiative.

1.1.2. Justification for the research

Programs such as TPP tend to be evaluated according to measurable short term results, and rates of attrition are one measurement used to monitor performance. Statistical measurements of attrition and retention may provide tools for evaluating

program successes and failures, but they do little to inform policy makers about the student experience of study. While it may be valuable to know how many students complete the program, it is arguably more important to know why not everyone was 'successful' and what factors contribute to outcomes. There has been a wealth of research about the student experience of transition to university (see chapter 2) in undergraduate programs. Qualitative research approaches have enriched our understanding of the student experience of first year undergraduate study, including experience of factors thought to influence persistence with study (Devlin 2013; Kift 2009; Lawrence 2005; McKay & Devlin 2014; O'Shea 2007, 2014; O'Shea &Stone 2011; Stone 2008). This body of research has contributed to our theoretical understanding of the transition process and provided rich detailed accounts of student transition that has complemented large scale descriptive accounts of the student experience of first year undergraduate study (Coates 2010; James et al 2010; Krause et al 2005).

There has been little published research into the student experience of studying pathway programs or experience of the factors that influence successful persistence. A relatively large scale study by Hodges et al (2013) compared rates of retention and attrition and investigated strategies for improving retention in five Australian enabling programs, including USQ. While this study produced a wealth of statistical information about comparative rates of retention and attrition and some factors associated with outcomes, the study provided little insight into how students in the various institutions actually experienced the factors. In addition, a very low response rate to the survey instruments used to gather data undermined the value of interpretation especially in relation to reasons for student non-completion. Research at the institutional level has provided useful insights into the demographical aspects of student characteristics (Bunn 2009; Clarke, Bull & Clarke 2004; Cullity 2006) and research by Bedford (2009) and Muldoon (2011; 2013) have investigated the statistical association between various student characteristics and study outcomes. As a result of these studies, we have a clearer understanding of the background characteristics and demographic features of students who typically constitute the student cohort in pathway programs. We also know some of the important factors statistically associated with successful persistence with study on such programs but there has been no published research that links these factors with a theoretical

account of persistence or which provides a student account of the experience of study and how the factors identified in the research literature impact on successful completion of pathway programs.

1.2. Contribution of the Study

Qualitative research approaches have been utilised to investigate the first year study experiences of students who have accessed university undergraduate programs through alternative entry programs (Devlin 2002, 2012; Lawrence 2005, 2009; O'Shea 2007, 2014; O'Shea and Stone 2011; Stone 2008). This body of research has increased our understanding of differences in the way traditional entry undergraduates experience the first year of undergraduate study compared with students who enter undergraduate programs through alternative entry programs or are otherwise categorised as non-traditional. For example, O'Shea (2007) found that non-traditional students who were the first in family to attend university faced different constraints or barriers to successful study compared with traditional entrants. Constraints related to unfamiliarity with university cultural and literacy practices have been shown to constrain attempts to successfully persist with study at undergraduate level (Devlin 2013; Lawrence 2005; O'Shea 2007; Stone 2008). The current study makes a contribution to this body of research by reporting the study experiences of non-traditional students studying on a pathway program (TPP). Findings from the study will supplement previous research investigating the nature of constraints and barriers faced by disadvantaged groups in their efforts to successfully transition to undergraduate study. It also contributes new knowledge that enhances our understanding of how successful students overcome disadvantage and successfully persist with study. Discussion of the findings from the study contribute to the debate about best practice to improve retention rates in pathway programs through an increase in evidence based research that shows how successful students engage with learning resources in a way that is different from students who fail to attain their learning goals.

The two main research questions the research project answered were:

1. What constraints do TPP students face in successfully persisting with study on the TPP?
2. How do successful students manage constraints to persist with study?

1.3. Philosophical approach and Research Design

The researcher adopted a pragmatic approach in which knowledge is viewed as both constructed and based on the world experienced by individuals. Pragmatic research draws on quantitative and qualitative approaches to research design according to needs and purpose. The philosophical position of pragmatism is that what works in terms of finding an answer to a research problem can be considered valid (Creswell & Clark, 2011; Johnson, Onwuegbuzie & Turner 2007). There is an assumption that individual behaviour results from a set of interacting sociological and psychological factors that are uniquely mediated by beliefs and meanings at the individual level (Creswell 2008). This suggests it may not be possible to fully explain behaviour from every perspective, but attempts to do so should include multiple perspectives, including those of participants. This study seeks to include the perspective of TPP participants and the researcher's interpretation of the meaning of their experience and therefore the research approach assumes there are common patterns of influence that may be identified and validated by adoption of an outside-inside perspective. Inside – outside validity may be defined as the extent to which the researcher accurately understands, uses and presents the participants' subjective insider or 'native' views (also called the **emic** viewpoint) and the researcher's outsider view (also called the **etic)** (Creswell 2008). One way of obtaining an emic perspective is to adopt an approach to data generation and thematic analysis of qualitative data that seeks to highlight the lived experience of participants from their own perspective and in their own words. An etic perspective is obtained by adding an interpretative dimension to the participants' views, enabling it to be used for practical theory building which can inform teaching and learning policy and practice (Creswell 2008). Thus the researcher adopted a binocular approach to interpretation of data. The first lens interprets the meaning of the evidence from the perspective of participants while the second lens used theoretical understanding to provide a different view of reality.

1.3.1. Methodology

A mixed methods approach to data generation, collection and analysis was adopted in which the researcher based knowledge claims on pragmatic grounds. The first phase of analysis interpreted data collected by a survey constructed to elicit background characteristics and student expectations related to TPP study. The data was collated and analysed to construct an overall student profile of TPP and provide a sampling framework for the qualitative phases of the research. Qualitative data was generated from analysis of student assignments and interviews with consenting participants. Responses to assignment questions were provided in week 1, week 6 and week 13 of the program and are assumed to reflect student experience of studying on TPP at various points of program progression. Exit interviews were conducted with participants who were classified as completers or non-completers. The criteria adopted for course completion was the number of assignments submitted. There are eleven assignment items in TPP 7120 including the exam, and participants who submitted at least ten were classified as completers. Semi-structured interviews were used to generate data pertaining to the student experience of studying on TPP.

1.3.2. Participants in the Study

TPP is a tertiary preparation and pathway program populated by students from a diverse range of backgrounds. Many students belong to equity groups targeted for inclusion in the widening access plan and overall the student body is characterised by a diverse range of demographic factors (Clarke, Bull & Clarke 2004) While some studies have focussed on the nature of disadvantage experienced by particular groups of students, such as first in family, the present study did not focus on any particular category of disadvantage. One of the defining features of TPP and other enabling programs is an open access entry policy which means that students are not selected for entry based on prior educational attainment. Thus the overwhelming majority of participants in TPP are characterised by a lack of recognized academic qualifications traditionally required for entry to tertiary level study. Thus, TPP students are ‘non-traditional’ in the sense that access to higher education is not based on qualifications obtained through secondary education. Nevertheless, the TPP cohort is characterised

by a wide diversity of background characteristics and demographics and therefore the framework constructed for selection of participants was designed to ensure that participants in the study represented a broad cross-section of the TPP student population.

1.3.3. The researcher

My interest in this research topic began when I commenced teaching on the TPP program after many years of teaching International students on what is generally described as English for Academic Purposes (EAP). A great deal of my EAP work took place in Europe and Asia as well as in multiple university settings in Australia and the United Kingdom. One of the striking contrasts between teaching EAP in an international context and teaching on an Enabling program in Australia was that retention rates in EAP were very high relative to completion rates in the Enabling program. This is not the place to speculate on the reasons for this difference, but I was intrigued to find out why so many pathway students appeared to withdraw from study before completion, and often very soon after enrolment. I later learned that many of these are 'phantom' enrolments (Hodges 2013; Muldoon 2011) or people who enrol in tertiary preparation programs but never actually 'participate'.

My role as a marker of assignments on the program alerted me to the wide diversity of backgrounds that characterise the TPP student cohort and also the wide range of 'abilities' evident from grades awarded for completed assignments. The second area of intrigue related to attrition was that non-completion is not always reflective of academic progress. In fact, it was obvious from examining student grade sheets that some students frequently obtain high grades for three or four assignments but then fail to submit any more. It appeared that failure to complete did not necessarily reflect lack of academic aptitude or failure to learn from the program materials. Attendance at Enabling Educators conferences and a brief survey of the literature on the first year experience (FYE) of undergraduate study made me realise retention and attrition was a major concern not only in TPP but more widely as part of the widening participation project.

I have a personal and professional interest in the widening participation process. On a personal note I was a 'non-traditional' university entrant in the 1970's in Scotland. Having completed secondary education at the age of sixteen without academic

qualifications I later studied part-time and attended ‘evening classes’ in a local technical college which was later to become part of the University of the West of Scotland. Unlike TPP, the pathway program I undertook was based on the secondary school curriculum and eventually I obtained the standard academic qualifications to attend university. Subsequently I achieved some measure of academic success in the form of a first class honours degree in Psychology and three Masters Degrees in International Politics, Adult Education, and Applied Linguistics. The point of recounting this information is that in my personal opinion the pathway program I undertook back in the early 1970’s was in many ways less academically challenging than TPP. Furthermore, I had no family responsibilities and my personal circumstances allowed me adequate time for private study. By way of contrast, I know from the literature and experience of teaching on TPP that many students have a very different situational context of study and many TPP students work or have family responsibilities. While many academics involved in pathway programs focus on questions related to academic standards and measures to increase retention rates, the research question which occupied my mind, in relation to persistence, was how students managed to successfully study under very challenging circumstances.

Thus my personal and professional history have shaped the design and structure of this research project. I wanted to understand the student experience of studying on TPP but not from the perspective of evaluation of the program. I wanted to know more of the personal circumstances that constituted the study context and I wanted to know how these circumstances and background characteristics shape the experience and influence the outcomes of study.

1.4. Ethical considerations

From a philosophical perspective when human beings participate in research the role of the researcher can never be neutral or objective. In this research project I was the researcher and a teacher/marker on the TPP program which was the setting for the research. This raised several practical and ethical issues. Full ethical clearance, in accordance with the requirements of USQ, was obtained prior to collection of any data.

The first issue related to potential bias as students may be inclined to ‘please’ the marker of their assignments and thus skew the data and results. Although I was a

participant in the research and a teacher on the program, I did not personally know or meet any of the other participants in the study. TPP is an online program with limited opportunities for face to face contact during support classes at some USQ campuses. I taught on the onsite support class at the Springfield campus of USQ but none of these students were selected for interview for the study. Responses to specific questions in student assignments were used in collection and generation of data but students could not have been aware at the time of assignment completion that responses might be used in this way. The consent of participants to use assignment responses was sought as part of the interview process and this took place after all assignments had been completed. Thus the responses to assignment items could not have been influenced by this research. None of the students interviewed denied permission for information from assessments to be used in the study. This procedure was sanctioned by the USQ human research ethics committee and the study complied with the principles contained in the National Statement on Ethical Conduct in Human Research (2007).

Nevertheless it is acknowledged that the unequal power relations between researcher and participants may have influenced responses to interview questions. Interviews were conducted after program completion in order to mitigate the potential for bias. Interviews were loosely structured and 'prompts' such as 'please tell me about…' were used rather than questions with a specific focus or topic in order to provide opportunity for students to narrate their experience of study. Data generated through interviews via telephone or email was triangulated with data from responses to items in student assignments and quantitative data from an initial student survey to improve the validity of the study.

1.5. Terminology

A great deal of the terminology employed in the research literature on student persistence reflects an institutional perspective. This perspective assumes that a continuous trajectory of progression from enrolment to graduation tends to be regarded as success, with departure from this pattern viewed negatively and akin to failure. There is a lack of agreement and precision regarding the appropriateness of commonly used terms (Glossop 2002). 'Wastage', 'attrition' and 'drop-out' are imprecise pejorative terms that reflect an institutional perspective and imply failure,

while' withdrawal', 'departure' and 'quitting' imply voluntary departure without intention to return to study (Longden 2002; Tinto 2006).

'Attrition' is a term that has been synonymously used with withdrawal but associated with an institutional or policy maker's perspective (Lawrence 2005). It is claimed that the terms 'persistence' and 'retention' reflect a student and institutional perspective respectively (Tinto 2006) but non-persistence implies lack of resilience or ability to stay the course and according to Longden (2002), should be replaced with the value-free term 'interruption to study' which implies an intention to return to study at a future stage. Failure to complete a program within the time frame specified by a particular institution may therefore indicate postponement of study or complete withdrawal, or an intention to continue at a different institution.

Retention rates in undergraduate programs have been generally regarded as a measure of 'success' from an institutional perspective but some researchers (for example, Johnston 2010) have argued for a shift in emphasis from discussion of retention in quantitative terms to consideration of the student perspective of success. Johnston argues for a need to listen to the student voice, and use the student experience of study to inform institutional policy and practices designed to improve retention. Nevertheless, any definition of success from a student perspective in the context of undergraduate programs is likely to include successful graduation from the program since undergraduate enrolment represents a considerable financial investment in the form of a HECS debt. Students who fail to complete an undergraduate program still accrue a HECS debt for the fees incurred. This assumption is not valid in the context of TPP and other Enabling programs in which students do not incur a HECS debt because the university tuition fees are met by the Commonwealth of Australia.

Thus, the financial implications associated with program completion are different in the context of pathway programs such as TPP in comparison with undergraduate programs (Hodges et al 2013). In addition, most enabling programs in Australia are open access and have no formal educational qualification entry requirements. It is possible that many pathway students use the experience of studying on the program to gauge whether or not tertiary study is a worthwhile future investment or lifestyle choice (Hodges et al 2013). The fact that there are no tuition fees incurred by

students may encourage participation from members of targeted equity groups. This opportunity to sample tertiary education without incurring the burden of a HECS debt may be important in widening participation for disadvantaged students but also changes student perceptions of 'success'. Thus a student who does not complete the entire program may regard the experience as 'successful' if this reflects a decision that the individual does not wish or does not feel capable of completing an undergraduate program. Both Hodges et al (2013) and Muldoon (2013) have referred to this phenomenon as 'positive attrition'.

Clearly there is a possibility that some students will sample an enabling program and decide not to complete the program. Others may complete the program but decide not to enrol in undergraduate programs. However it is difficult to know what proportion of the non-completers actually withdraw without any intention of returning. It has been argued that the majority are not 'dropping-out' so much as postponing study until a later date (Muldoon 2013). Students who do not complete the program tend not to withdraw formally and seldom notify the university of the reasons or of their future intentions. End of course exit surveys tend to have low rates of response and successful persistors respond in greater number compared to those who fail to complete. Indeed Hodges et al (2013) reported that the response rates from students who did not complete the enabling program was close to zero in some cases. This may reflect unfamiliarity with university processes and practices or may reflect the degree to which some students are intimidated by institutional culture and practices from which they feel marginalised. Very little is known about why students do not complete pathway programs. It is often impossible to know if a student has 'withdrawn' from a program, 'dropped-out' of higher education, transferred to another institution or decided to study the same program at the same institution at a later date (strategic withdrawal). Thus it is difficult to know what successful persistence means to students by consideration of statistical data related to rates of attrition and retention.

This study will adopt the terminology used in the research literature to discuss constraints and persistence with study but discussion of the findings of the study will adopt a student perspective and use successful persistence with study to indicate achievement of students' personal goals and study objectives. Constraints to

successful persistence therefore means factors which inhibit achievement of students' individual goals and objectives.

1.6. Outline of the report

This chapter has examined the background to the research and the nature of the problem investigated. Justification for the research was established by reference to current literature related to retention and attrition in undergraduate and pathway programs. The aims and objectives of the research have been established and the two main research questions posed. The setting and characteristics of research participants has been presented along with discussion of terminology and an outline of the research design employed to answer the research questions.

Chapter two will present the conceptual tools and theoretical perspectives that guided analysis and discussion of the findings. Concepts of forms of capital derived from Bourdieu's theory of Social Reproduction are utilised to explore the nature of educational disadvantage in relation to inequitable distribution of resources. Social Integration theory and Ecological Theory are also used to frame discussion of the nature of constraints to successful persistence experience by some students and how those constraints are managed in certain circumstances. Chapter two also contains a review of relevant literature used to identify factors established by research to influence retention and attrition in undergraduate and pathway programs. Chapter three described the research design and methodology used to investigate the research questions. Chapters 4 and 5 present outcomes of the current research project. Chapter 4 discusses findings in relation to the nature of constraints faced by TPP students while chapter 5 discusses how those constraints are managed by students who successfully persist with study. Chapter 6 presents conclusions and implications for the teaching and learning community.

Chapter 2: Conceptual framework and literature review

2.1. Introduction

This chapter is in two parts. The first, the conceptual framework, outlines the three major perspectives informing the study. These include Tinto's (1975) model of student withdrawal (departure), Bourdieu's theory overviewing the role of education in maintaining social inequality and Bronfenbrenner's (1979-96) ecological theory. The second part of the chapter will present a review of factors identified in the research literature as barriers to persistence as well as those factors influential in determining persistence with study.

This chapter begins with a conceptual framework based on three major theoretical approaches. The theoretical approach of Tinto's (1975) model of student withdrawal (departure) will be critiqued first because it has had the most influence in terms of empirical research into retention and attrition, especially with relevance to the first year of undergraduate study. The second major theory to be discussed is that of Bourdieu's social and cultural reproduction theory. Bourdieu's theory is included because it is a useful framework for discussing the role of education in maintaining social inequality and the nature of barriers and constraints faced by educationally disadvantaged groups in successfully persisting with study at tertiary level. The theory is less useful, however, in explaining social mobility or success of disadvantaged groups at university. Bronfenbrenner's (1979-1996) ecological theory will be utilised to explain how some students are able to manage constraints and successfully persist with study. Although more contemporary theories are discussed in the chapter they are all derivative of the three theoretical frameworks discussed above.

2.2. Tinto's Model and The Social Interactionist Perspective

The most influential model of persistence to date has been that developed by Tinto between 1975 and 2011.This model explains persistence by reference to the interactions between the student and the academic and social systems of the institution. Essentially the transition process is viewed as a rite of passage in which an individual finds out through engagement with the university community if he or

she ‘fits in’ with prevailing academic and social practices of the university. Those holding incongruent values or failing to socially integrate with others in the college develop weaker commitment to the social system and are more likely to seek ‘voluntary departure’; in other words they are more likely to leave because they perceive they do not ‘fit in’. Thus students who conform to social and academic behavioural norms tend to successfully persist. Individuals who do not ‘fit in’ academically or socially either fail or drop out.

In brief, this theoretical model of dropout argues that the process of dropout from college can be viewed as a longitudinal process of interactions between the individual and the academic and social systems of the college during which a person’s experiences in those systems (as measured by his normative and structural integration) continually modify his goal and institutional commitments in ways which lead to persistence and/or to varying forms of dropout.
(Tinto 1975, p.94).

From an institutional perspective, the transition process within this model may be viewed as one of filtering out those individuals who lack the necessary wherewithal to match academic and social norms of behaviour. Within the model, background characteristics are important to successful social and academic integration. Prior educational history and levels of academic achievement shape expectations and are predictive of academic integration and successful persistence. A history of engagement in the types of social activities typically found on a residential university campus and a sound academic record are predictive of ‘fitting in’ socially and academically. Within the model, successful integration of the social and academic aspects of university life results in student satisfaction and commitment to the institutional provider. Persistence with study is therefore predicated on academic ability and successful social adaptation to university life. From the student perspective, the transition process is one of adaptation or assimilation into the university culture.

2.2.1. Critique

Despite this model reaching ‘almost paradigmatic’ status (Braxton 2000), the extent of empirical evidence to support the model has been mixed and it is doubtful if the model fits the social context of study outside of traditional residential colleges in the

United States. Essentially this model assumes that persistence depends on acceptance and adaptation to university practices. The model is based on assumptions about the 'traditional' student who enters university based on specified academic credentials and who is similar in terms of educational background, social status and age to other new recruits. The model also assumes full time study on residential campuses which constitute both the learning and social environment.

The student population today is much more diversified compared to the nineteen seventies when this theory was developed, and the social and academic context is also very different. The importance of considering alternative situational contexts to explanations of persistence led to development of derivative models (Bean & Metzner1985; Kember 1989, 1995). Modifications of Tinto's model were designed to take the social contexts of study into consideration, such as part-time study, enrolment at non-residential colleges and participation by groups of students identified by various sociological criteria as 'disadvantaged'. This makes the derivative models of more direct relevance to the TPP situational context. Since the mid-nineteen eighties 'non-traditional' students have been over represented at USQ generally, and in Preparatory Programs in particular, with socioeconomically disadvantaged groups, rural based students, and mature aged learners studying by distance constituting a majority of undergraduate entrants (Clarke, Bull & Clarke 2004). The model developed by Kember (1995) will be discussed in more detail because it was developed for use with a student population with characteristics similar to those typically found at USQ, although the model was not intended to explain progression on pathway programmes.

2.2.2. Kember's Model

The model of student progress (Kember 1995) was built for use with a different student population from the one described by Tinto. While the former was concerned with traditional, full time tertiary students studying in a face to face context, Kember's model was built to explain the decision making processes that influence persistence and withdrawal in courses that are part-time, delivered by distance education in a context in which English was the medium of instruction but not the first language of all of the participants. In addition, the student population was assumed to be older, mature-aged participants with full time jobs. TPP students, by

comparison, also tend to be mature aged, from educationally disadvantaged groups and distance education has been the traditional mode of delivery, albeit on a full time basis. Thus in terms of student characteristics or background factors, Kember's model is more applicable to the TPP context than that of Tinto.

Within the model, the background factors that are depicted as important relate to educational background, family status and employment. These factors do not determine outcome directly but are influential in shaping experience after enrolment and partly determine the qualitative nature of student engagement with the program. In Kember's model, social integration essentially means the extent to which a student is able to accommodate study within an existing lifestyle that includes employment, family and social commitments that may conflict with study. Successful integration depends on support from employers, work colleagues, family and friends and requires that adequate space be found for study within the student's lifestyle. Academic integration is a broadly inclusive category within the model that includes 'all elements of contact between an institution and the students whether these are of an academic, administrative or social nature' (Kember 1995, p99). In terms of empirical testing of the model, however, academic integration was deemed to consist of four aspects or sub-scales, namely study approach, motivation, course evaluation and language ability.

Details of the mechanisms of the model are not important to the present study since the objective is not to test the model per se but to identify broad factors used in the model that might inform the present study. At a general level, background characteristics and prior experience influence academic and social integration which together qualitatively influence academic performance. The model predicts that students who perceive they will be unable to match academic requirements withdraw rather than risk failure. In addition, the decision to withdraw from study will be justified and explained with reference to attribution theory (Kember 1995). Essentially this theory predicts that people tend to explain successes to internal psychological attributes such as being highly motivated, while 'failures' are attributed to external circumstances. Thus, according to Kember's explanation of his model, students who fail to complete courses will attribute this to not having enough time or because of the negative effects of non-study commitments. In the final analysis it is lack of academic integration that determines persistence and therefore

within this model failure to find adequate time for study is indicative of low motivation (one of the sub-scales of academic integration).

There have been few studies designed to test the reliability or validity of the Kember model. One exception is a replica study conducted by Woodley et al (2001) with students from the Open University in UK. Open University (OU) is a distance education, part-time course in the U.K. that is populated largely by mature age learners. After adjusting the model to suit the OU context the researchers found little internal consistency in the sub-scales and few of the causal relationships described in the Kember model achieved statistical significance. In a follow up to the original Kember (1987) study, Rowlands (2004) investigated the factors influencing attrition and retention of remote higher education students in Tasmania. Results confirm the important influence of external constraints but suggest these factors are 'real' rather than 'excuses' explained by attribution theory. Rowlands's study was designed to assess whether developments such as the advent of online learning had significantly impacted on retention since Kember's original study in 1987. The results showed remarkable similarities between Kember's 1987 study and Rowlands (2004).The two predominant reasons for withdrawing cited in both studies were family and work. In the Rowlands study, fifty six percent of all students cited pressure of work, family or other 'external' constraints as their main reason for withdrawal. However, in contrast to Kember (1987), the Rowlands study also questioned continuing and completing students about their experiences and a similar proportion of respondents also cited work and family commitments as being very difficult to balance when studying. This strongly suggests that external constraints are very real factors that heavily influence withdrawal and persistence rather than excuses for anticipated poor academic performance as argued by Kember (1987; 1995). This conclusion underlines the importance to the present study of investigating the nature of constraints facing TPP students but also highlights the methodological importance of including students who do not persist with study as well as those who successfully attain their learning goals.

2.2.2.1. Critique of Kember's Model

In terms of relevance to the TPP context, Kember's model recognises that adult education takes place within a context of pre-existing social networks and therefore adult study requires a degree of adaptation of an existing lifestyle to accommodate

the demands of study. The extent to which this is possible is likely to be influenced by 'outside' factors such as support from family and the amount and nature of non-study commitments, but is also likely to be influenced by academic factors such as expectations related to the nature of tertiary study and previous experience in dealing with academic requirements. It should also be noted that although Kember's original presentation of the model does tend to emphasise the ways in which the student must conform to institutional norms there is also an implication that course design needs to accommodate the needs of students (Kember 1995, p.15). Thus the model does imply an important role for the educational provider to know the background characteristics of participants and how those characteristics impact on the academic and socialisation process after enrolment.

Course design aimed at meeting the needs of participants should take into account not only the goodness of fit between biographical characteristics of participants and institutional provision but also the situational context in which students will engage with the course content. From a research perspective, these considerations suggest a need for small scale studies of persistence such as this one that take account of context, background characteristics of students and the student experience of institutional provision in the form of specific programs or courses.

2.2.3. The relevance of Tinto and derivative models

All the models of persistence derivative of Tinto's original model of 'voluntary departure' stress the importance of background factors and prior learning experience. However they do not adequately explain how some students are able to overcome concomitant disadvantages associated with the 'wrong' background or 'insufficient' prior learning, in other words successful persistence of educationally disadvantaged groups. Essentially, models derived from Tinto's may be described as explanations of 'departure' or withdrawal from study. The models depict academic factors as separate from, and more influential than, social factors in determining persistence, yet there is little agreement about which academic factors are most influential. Nevertheless the central importance placed on academic factors has contributed to the popularity of the model since educators and institutional practice can play a central role in manipulation of academic factors. This is in contrast to alternative explanations that depict withdrawal and persistence as phenomenon largely beyond

the control of the institution (Bedford 2009). In recent times the role of the educator has been further emphasised despite lack of clear and unequivocal evidence that appropriate institutional intervention can significantly impact on retention rates (Christie, Munro & Fisher 2003). For example, Tinto (2011) acknowledges that overall rates of attrition have remained steady for at least 20 years, but explains the lack of success of intervention strategies by reference to the failure to focus on classroom practice.

This is the case because most efforts to improve college completion, such as learning centres and first-year seminars, sit at the margins of the classroom and do not substantially improve students' classroom experience.
(Tinto 2011, p6).

Thus Tinto remains convinced that the 'cause' of student withdrawal resides largely in an adverse academic experience. Institutions have failed to address the root cause of the problem because they have instigated reforms and changes that impact on the student experience in ways that are peripheral instead of focussing on the heart of the problem, the classroom.

Nowhere is involvement more important than in the classrooms and laboratories of the campus, again especially during the first year of college (Tinto 2011, p4).

The solution, according to the model, is to develop more appropriate student engagement with the institution, especially engagement with classroom teachers. This problem-solution scenario has prompted a wealth of research and empirical investigation, the results of which will be discussed in the section on empirical research. In the meantime the focus on 'the classroom' is problematical in the context of TPP since it is an online course and for many students the only class they will encounter is a virtual one. Nevertheless if the 'online classroom' is a source of constraint for TPP students it should be evident from the results of the present study since the focus is the student experience of constraints. 'Involvement in the classroom' is a very broad area and it is anticipated the findings from the present study will provide more specific information about which aspects of engagement represent constraint for TPP students.

2.2.3.1. Social and Cultural Integration

Two factors identified in the literature as strong influences on student persistence are the nature of experience prior to tertiary enrolment and the ways in which personal histories shape the nature of the transition experience. Viewed from a cultural perspective, different social groups display divergent histories that differentially match the cultural expectations of higher education. Different educational histories result in different expectations about the nature of tertiary study which influence interpretations of post enrolment study experiences. For traditional entrant undergraduate students, transition to university life often appears an exciting 'rites of passage' for which he or she has been preparing for many years. In terms of life stages, the transition to university represents a smooth trajectory bridging adolescence to adulthood. 'Fitting in' is largely a matter of establishing the right social connections, learning to live independently of parents and guardians and extending the range of academic knowledge and skills previously acquired. This view of the transition process is adequately theorised within Tinto's model. For non-traditional entrants, however, becoming a university student can be a negative experience associated with feelings of loss, dislocation and alienation, (Christie et al 2008); crises of personal and learner identity, (Briggs, Clarke & Hall 2012) and a sense of 'not fitting in' with peers or with the 'dominant narrative' of what it means to fulfil the tertiary student role (Lehmann 2007). Thus the 'constraints' to higher education may not only be difficulties associated with academic knowledge or skills acquisition, but with demonstrating the capacity to engage with the cultural and linguistic practices necessary for mastery of the student role. The transition to higher education is, therefore, as much a social and cultural journey as an academic one and discussion of the meaning and effect of prior experience needs to take place in a framework that allows for the interplay between social, cultural and academic factors. 'To understand drop-out we need to look beyond student support needs or institutional barriers to cultural narratives and local contexts' (Quinn 2004, p. 57). Not fitting in at university may be the result of social incongruence (Devlin 2013) and cultural factors rather than academic deficit.

2.3. Social Reproduction Theory

One of the central aims of Bourdieu's theory is to explain the role of higher education in the maintenance and perpetuation of social inequality (Bourdieu 1977, 1990, 1992). This has relevance to the present study since one of the aims of TPP is to provide an opportunity for educationally disadvantaged students to study at tertiary level. This perspective represents the shift away from the elite higher education to a more accessible one for marginalised students. Bourdieu's explanation of the role of education in social and cultural reproduction centres on the interplay between forms of capital and habitus relevant to the field of higher education. According to the theory, the cultural practices that dominate universities, especially in relation to literacy and linguistic practices, favour certain groups who have been nurtured in the dominant culture during primary and secondary socialisation. In other words, by the time some groups enrol at university they are more familiar with the sociolinguistic and cultural practices of academia in comparison with other groups that have a different educational history. Some social groups have a different cultural inheritance (habitus) that makes them less familiar with academic institutional language and practices and therefore they must overcome a number of disadvantages to succeed. TPP students are an example of such a social group. Bourdieu claims that non-elite groups or classes are therefore less likely to want to attend university or if they do they are less likely to successfully persist with study compared with elite or middle class students (Bourdieu & Passeron 1990). Students without the appropriate background (habitus) therefore tend not have ambitions that include higher education but if they do decide to attend university they will tend to leave if they perceive they don't 'fit in' or are likely to fail.

Thus, previous performances being equal, pupils of working class origin are more likely to eliminate themselves from secondary education by declining to enter it rather than to eliminate themselves once they have entered, and a fortiori more likely not to enter than to be eliminated from it by the explicit sanction of examination failure (Bourdieu & Passeron1990, p.153).

The idea that students may withdraw rather than risk failure is very similar to Tinto's explanation of 'voluntary departure', but whereas Tinto's theory depicts social and academic integration as key to 'fitting in', the early student experience at university is heavily influenced by beliefs and values derived from habitus.

2.3.1. Habitus

The concept of habitus includes social and cultural aspects of background characteristics which results in a way of being and a way of doing that is a product of primary and secondary socialisation, and is central to Bourdieu's explanation of social reproduction. (Reay 2004) It is experienced as personal values, belief systems and dispositions that constitute a sense of self in the world. (Naidoo 2004) Although habitus constitutes behaviour derived from social norms and cultural inheritance, individuals experience it as a sense of self (Naidoo 2004). Thus habitus represents collective social history of past experience, in the present, which shapes future actions.

Social reality exists, so to speak, twice, in things and in minds, in fields and in habitus, outside and inside of agents. (Bourdieu 1990, p. 116).

Thus habitus and individual histories derive from and reflect social position in a stratified society. At the individual level, habitus feels like a matter of choice in terms of attitudes and values but in fact is an expression of social position. There is little room for agency or individual choice. Habitus applied to the field of education is usually described as values and attitudes towards education:

It is the system of dispositions towards the school, understood as a propensity to consent to the investment in time, effort and money necessary to conserve and to increase cultural capital. (Bourdieu 1977, p. 495)

Time, effort and money are not cultural capital but economic capital. This means that without sufficient economic capital, individuals from some social groups cannot access the cultural capital necessary for success in (elite) institutions of higher education. It is not so much that 'lower classes' do not value what 'top schools' have to offer so much as there is no point seeking what is not possible since most people lack the necessary investment (economic) capital. This is largely because the cultural capital necessary for success at 'top universities' can only be accumulated through attendance at 'top schools' that 'specialise' in preparation for higher education at elite universities, and this requires a considerable investment of economic capital in the form of time and money. Specialisation in this context means accumulation of

cultural capital of the form valued at universities, especially ways of being and doing related to language and literacy practices. Low levels of the appropriate forms of cultural capital therefore represent a considerable barrier to successful persistence with tertiary study. Since TPP students have very little prior experience of formal education they are likely to have low levels of relevant cultural capital and are likely to be constrained by lack of familiarity with the cultural practices of academia. Habitus determines the nature and forms of cultural capital accumulated at commencement of TPP whereas university habitus determines the forms of cultural capital necessary for successful persistence in the program. Incongruence between the TPP student habitus and the institutional habitus of USQ is likely to be experienced as a constraint to successful study

Institutional habitus is conceptually analogous with the notion of individual habitus, since institutions also embody particular values, beliefs and practices that are derived from their social status and position. Historically, universities have been dominated by a particular social class or group and therefore the culture and practices of higher education reflect those of the dominant group or class. This represents considerable advantage to those dominant groups and the advantage is maintained by subsequent generations through cultural inheritance and the habitus. Although institutional habitus reflects social structures, it is not static or deterministic but is subject to change through contestation. Indeed massification of the higher education system has resulted in change to the habitus of some universities resulting from increased marketization and competition from other universities (Lingard & Christie 2003). Nevertheless, according to Bourdieu, universities assume possession of forms of cultural capital that in fact only some groups possess, especially linguistic capital.

By doing away with giving explicitly to everyone what it implicitly demands of everyone, the education system demands of everyone alike that they have what it does not give. This consists mainly of linguistic and cultural competence and that relationship of familiarity with culture which can only be produced by family upbringing when it transmits the dominant culture.
(Bourdieu, 1977a, p. 494, cited in Sullivan, 2002, page 144).

In this quote Bourdieu is making the point that universities expect familiarity with cultural practices but do not necessarily provide instruction in them. For example,

universities assume newly commencing students will possess a range of literacy competencies and therefore do not tend to provide assistance or support that enables students to accumulate this form of cultural capital. This assumption effectively disadvantages students from social groups that have little familiarity with such literacy practices and who are otherwise unfamiliar with dominant cultural practices regarded as the norm within higher education.

The concept of habitus is an extremely useful tool to discuss the idea of 'fitting in' at university within the broader framework of widening participation. The purpose of widening participation is not only to increase the numbers of university graduates in total but to increase the numbers of graduates from communities that historically would not have participated in Higher Education. It is therefore essential that universities learn more about how students from particular backgrounds experience the transition process so that future policy and practices can better meet the needs of the new student population. The present study seeks to provide this knowledge. This is particularly important for universities like USQ that have deliberately targeted non-traditional students for recruitment. If pathway programs such as TPP do not take the cultural background of prospective students into consideration when designing curricula then there is danger of a mismatch between the needs of students and institutional provision. Providing access to university is not enough and institutions need to address the cultural causes of disadvantage by enabling accumulation of capital rather than assuming student possess it from the outset.

It is claimed that transition to university is 'harder' for students from non-elite cultures (Longden 2004). This is partly because the transition process is a within culture experience for some (traditional) students whereas it is an intercultural experience for non-traditional students (Lawrence 2004). The advantage for 'elite' or traditional university entrants arises because there is a closer match between the university and home habitus. Thus it is claimed the habitus (background) of some students acts as a constraint to the transition process in comparison with other groups whose habitus facilitates transition. However, competition within the sector has resulted in some universities, such as USQ, targeting equity and other educationally disadvantaged groups in terms of recruitment. People are most likely to embrace experiences that confirm rather than disrupt their habitus (Bourdieu 1990). It is

therefore incumbent on USQ to embrace changes in institutional habitus that better match the habitus of the social groups from whom it recruits.

2.3.2. Forms of capital

Forms of capital is a metaphorical reference to different types of resource that are of utilitarian value within a particular 'field', in this case the field of higher education. Different forms of capital, but particularly social and cultural capital, provide a cumulative advantage in achievement of personal ambitions within a particular 'field'. Bourdieu depicts social capital as the sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Bourdieu 1992). The utility value of social capital as a human resource is to enable access to cultural capital. Cultural capital is constituted by particular types of knowledge and mastery of forms of sociocultural (linguistic and literacy) practices that are valued and legitimised by the education system.

According to social reproduction theory, successful integration into a particular social space (field) requires mastery of relevant cultural practices based on accumulation of appropriate forms of cultural capital that are dominant in that field. Higher education is an example of a field and therefore possession of the right form of cultural (academic) capital is necessary for success in this field. However accumulation of the right forms of cultural capital depend on primary and secondary socialisation. By the time the majority of students enter university they have already accumulated a 'reservoir' of cultural resources which facilitate transition to university but some students are relatively disadvantaged because their educational history has not enabled them to accumulate enough academic capital (Devlin & McKay 2014). Within Bourdieu's conceptual framework, differences in cultural backgrounds are interpreted in terms of variation in the amount and type of cultural resources that can be readily activated to acquire academic capital. One problem here is that this 'difference' in cultural background is often framed in terms of 'deficit'. Certain groups or classes have more of the 'right' (or appropriate) type of cultural capital and this ensures an easier transition to academic culture because of previous investments made during primary and secondary socialisation. Empirical evidence for cultural deficit is however, equivocal, and is predicated on assumptions

surrounding the ‘right’ type of cultural capital. Bourdieu’s empirical research focussed on haute culture transmitted through cultural inheritance by elite groups in France that dominate les Grandes ecoles (Bourdieu & Wacquant 1992, p. 231) These forms of cultural capital expressed through taste for ‘high’ arts and literature, is highly valued by elite institutions which use possession of this form of capital as entry criteria and therefore effectively to include some groups and exclude others. This practice ensures a match between the personal and institutional habitus of students from elite backgrounds wishing to enter elite institutions.

The importance attached to forms of cultural capital within the theory begs the question of what forms of cultural capital are important for success at non-elite universities. Dominant cultural practices reflect arbitrariness as well as having utilitarian value. For example, the requirement to know Latin as a criteria for entrance to university may be regarded as an example of cultural arbitrariness. Knowledge of Latin has symbolic value as a marker of attendance at elite schools that ‘specialize’ in university entrance qualifications, but in many cases has no utilitarian value once an individual has commenced tertiary study. The capacity to read and write formal English, on the other hand, may be cited as an example of cultural capital that has utilitarian value since it may be regarded as the basis for acquisition of other more specialised and discipline based literacy practices such as reading and writing for academic journals. Differences in institutional habitus will lead to variation in the forms of capital that are valued at particular universities. Thus the forms of cultural capital deemed necessary for success at Oxbridge may be very different from that required at USQ. Thus one of the contributions of the present study will be to identify the forms of capital that facilitate successful study on a pathway program such as TPP.

2.3.3. Critique of Social and Cultural Reproduction Theory

The strength of this theory lies in the explanation of how elitist groups are able to maintain their dominant social position within the education system. The core argument is the congruence between forms of cultural capital deemed valuable by elite institutions and that transmitted through the family and school system. The advantages gained appear to be based on merit and academic aptitude rather than privilege. Advantages gained through cultural inheritance are sustained through

social capital. Bourdieu uses the example of lawyers who achieve distinction in their careers based not only on accumulation of cultural capital in the form of educational qualifications but on professional and social ties (capital) that include a self-perpetuating elite at the expense of others. Bourdieu's conception of social capital is one of an investment strategy where connections are established as individual investments to maintain their superior social position. Social capital is therefore an asset of privileged groups and is used to exclude other groups (Field 2008). Cultural and social capital are different resources that are accessible only by the privileged. It is the combinatory effects of these different forms of capital that perpetuate privilege. It is not so much that disadvantaged groups lack social capital in the form of connections or networks but the fact that these connections do not provide access to forms of cultural capital necessary for success within the field of education. However Bourdieu's depiction of cultural capital as the haute culture of the elite seems rather dated in the modern world and it is possible the forms of cultural capital necessary for success at university are different in modern day Australia where many students are seeking access to non-traditional, non-elitist universities such as USQ.

The influence of habitus in explaining educational disadvantage has become almost ubiquitous and is sometimes assumed that habitus is static (Reay 2004). It is possible, however, that habitus and disadvantage may be changed if opportunities are made available. Many students from educationally disadvantaged backgrounds succeed at university and reduce social and economic disadvantage (Gale & Parker 2015), therefore it must be assumed they are able to somehow accumulate sufficient cultural capital. This suggests that habitus is more fluid than static and can be changed over time if social circumstances permit. It is not clear from Bourdieu's theory how disadvantaged students can overcome the disadvantages arising from habitus and therefore one of the aims of the present study is to demonstrate how non-traditional students on a pathway program can accumulate sufficient capital to enable successful persistence with study.

2.4. Ecological Theory

Ecological theory can be used to explain how educationally disadvantaged students can overcome constraints and succeed in transitioning to university. Bronfenbrenner's ecological theory, developed between 1992 and 2005, depicts

learning and human development occurring through interaction within and between the different levels of an ecosystem. The model is dynamic and interactional, so that changes at one level of the system can have effects at other levels of the system. The micro and meso systems represent the inner levels at which most everyday interactions occur. Bronfenbrenner's theory not only provides a framework for depicting the multi-system factors that influence development but also the nature of the processes within the environment. These processes are influenced by intrapersonal and interpersonal factors, or the way in which individual and external forces shape development (Lewthwaite 2011). Discussion of TPP persistence is therefore largely concerned with relationships and practices that comprise the microsystem, including those with whom participants have daily or regular contact, such as spouses, children, work colleagues, study peers and 'significant others'. Human and material resources required for successful study are distributed throughout the system, although most of the formal learning resources are nested within the mesosystem which include USQ resources such as study desk, course materials, tutors, learning support personnel and other aspects of course provision. Appropriately organised activity in the mesosystem should enable participants to learn more and better in their own microsystem. The extent to which individual learners exploit available resources and the manner in which they do so, however, impact on perceived satisfaction and ability to meet the demands of tertiary study. Ecological theory provides architecture for connecting factors related to persistence that originate at different levels of the social system. USQ policies and practices are implemented in response to government and societal demands. University policy determines TPP practices which of course directly impact on patterns of student engagement. TPP participants utilise human and material resources in a context of interconnected relationships and processes. An ecological approach therefore allows different levels of analysis to be integrated within the same framework.

From an ecological perspective, effective use of human and material resources is predicated on possession and activation of the different forms of capital discussed in connection with Bourdieu's theory. Whereas social, cultural and academic forms of capital are resources monopolised by individuals and elite groups within Bourdieu's theory, they are distributed throughout the ecosystem in Bronfenbrenner's ecological

theory. Successful transition to university requires TPP participants to access and utilise these resources in an effective way.

2.4.1. Personal Learning Ecologies

A learning ecology is a metaphorical reference to a collection of overlapping communities of interest (Brown 2002). TPP participants may therefore be conceptualised in terms of interconnected personal learning ecologies, existing within a nested system of interacting processes and connected relationships. The most obvious set of processes and relationships learners engage with is the structured processes of the TPP curriculum. Resources in the form of social, cultural and academic capital are distributed throughout the ecosystem and persistence with study is predicated on the capacity to exploit resources of both an academic and non-academic nature. There is a very clear emphasis in this theory on interaction but the context of interaction is very different from the interactionist model of persistence developed by Tinto. For Tinto, important interactions occur between academics and students to determine academic integration and student to student interactions to determine social integration and identification with the institution. Within an ecological framework, however, the university is only one source of cultural resources and successful students need to access resources from different parts of the microsystem. Access to key resources is dependent on managing good relationships with significant others in the microsystem and also in extending the number of social contacts that can facilitate accumulation of the forms of academic and cultural capital that underpin successful persistence. People outside the university sector are just as important human resources as academics, tutors and university administrators.

2.4.2. Bronfenbrenner's ecological theory (1979-1996)

Learning and human development occurs through interaction within and between the different levels of an ecosystem. Figure one below depicts the different system levels:

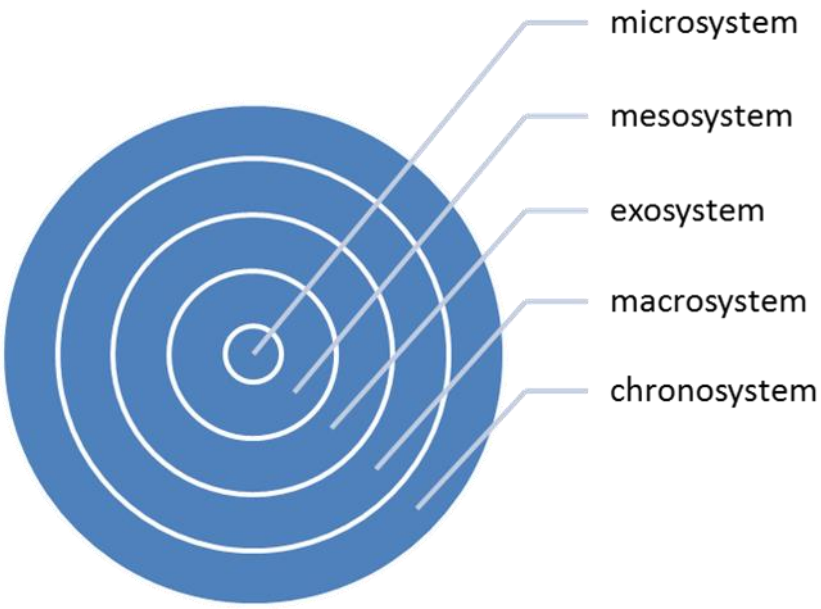


Figure 2.1: subsystems of the ecological system based on Bronfenbrenner (1994)

The micro and meso systems represent the levels at which most of the everyday TPP interactions occur. Discussion of the persistence of TPP participants is therefore primarily concerned with interactions and processes within the microsystem (personal learning ecologies), nested within the mesosystem level which contains USQ and other resources. Factors that impact on persistence, however, also relate to the exosystem because it is at this level that institutional policies and practices are created. These policies and practices in turn reflect macrosystem policies and practices that shape those at lower levels. Decisions taken at higher levels have a powerful impact on the nature of resources available to learners. For example course design and associated assessment regulations reflect wider university structures and practices which largely determine availability of resources and possible configuration and patterns of engagement. The macrosystem represents the level at which government policy may influence participation in TPP. For example the payment of TPP fees by the Commonwealth of Australia, rules about child care and other policy decisions that enable some students to qualify for Centrelink benefits while studying full time on pathway programs represent powerful structural incentives or disincentives for enrolment on pathway programs.

Microsystem

A philosophical assumption at the heart of learning ecologies is that intellectual development in the individual originates within a social context of interaction with others, a basic principle of intellectual development attributed to Vygotsky (1980). According to this theory of learning, intellectual development appears to reside within individuals but actually emerges from interactions between people. TPP participants interact in a number of relationships and practices that comprise the microsystem, including those with whom they have daily or regular contact, such as spouse, children, work colleagues, study peers and 'significant others'. Relationships have bi-directional influences, so that the beliefs and behaviour of an individual will both influence and be influenced by significant others. The implication is that psychological and cultural changes brought about through studying on TPP will impact on other people with whom the TPP participant has contact. While we may place the learner at the centre of the learning process, significant others may play an important role in shaping and evaluating the 'new self' that emerges through the transition process of becoming a tertiary student. Social relations of students both influence, and are influenced by, participation in TPP. Thus studying TPP in many ways may be very much a family affair with considerable generational effects on widening participation in higher education.

In addition, a learning ecology framework highlights the importance of understanding how informal learning outside of institutional provision can blend with formal learning occurring in the primary learning setting. For example, the learning contexts in which people master technical skills in the use of technology, such as computers and mobile devices, has been shown to be distributed among multiple settings and resources (Barron 2006). Thus TPP learning may be distributed across a range of resources including personal contacts, text-based curriculum resources and internet exploration, as well as more structured learning opportunities. Development of personal learning ecologies may therefore reflect choices and availability of resources and strategies used to overcome constraints attributable to situational circumstances. Thus personal learning ecologies are viewed as dynamic learning systems open to multiple influences, with both relational and material resources important to attainment of goals.

Mesosystem

It is at the microsystem level that bi-directional influences are strongest and have the greatest impact on the individual (Kail & Cavanaugh 2015).Interactions at outer levels can, however, still impact the other structures. The mesosystem includes the curriculum, course specifications, and delivery systems that partially comprise TPP practices. This is the level at which learning and support resources are provided by the institution, such as study desk, course materials, counsellors, careers staff, tutors, learning support personnel. Appropriately organised activity in the mesosystem should enable participants to learn more and better in their own microsystem. Successful persistence with study requires good communication and positive relations between significant people in the micro and macrosystems.

The exosystem consists of institutional policies and practices that indirectly impact on students through, for example, course design (Kail & Cavanaugh 2015). The exosystem is the level at which university policies and practices are made manifest to learners through course specifications, curriculum and assessment practices, as well as patterns of interaction and engagement between the course and participants. For example, the format and criteria for successful assignment completion, provision of support services, and norms and expectations related to communication between students and university, are all determined at the exosystem level. This level will also include local government and councils, different types of local communities, media outlets and possibly local industries and employers.

The macrosystem is societal level and includes governmental policies and practices, dominant socioeconomic and cultural values and norms of practice (Kail & Cavanaugh 2015). Ideationally, the macrosystem represents dominant ideas and values related to socioeconomic and cultural practices such as the role of employees, parents, students, citizens, universities, religion and other 'matters of state'. Macrosystem practices will influence how TPP students understand social roles such as student, worker or parent.

The chronosystem depicts time as a resource (Kail & Cavanaugh 2015). Changes in the environment in which the individual is situated, for example changes to family structure, place of employment or residence, unexpected events like illness, or changes in interpersonal relationships may impact on other aspects of the

environment such as the time available for study or time spent on communicating with other learners.

2.4.3. Learning and accumulation of capital in an ecological context

An ecological framework requires a view of learning as a social process where formal and informal learning are blended. Individuals 'learn' through interconnections between family, peers, friends and significant others in addition to through more formal contacts with the university. The outcome of this form of 'blended' learning is more than the accumulation of academic skills and knowledge embedded in the curriculum, but also includes the capacity to enhance learning itself through establishment of connections and development of interpersonal skills that underpin interdependent learning.

Accumulation of capital involves both formal and informal learning as part of the social context of learning. Previous models of learning and persistence have emphasised an important, but peripheral role for informal learning as 'support', with formal learning and engagement with the curriculum playing the dominant role in persistence. Thus, according to Tinto (2011), it is what happens in the classroom that determines persistence. In other words, persistence is determined by the degree of success in formal learning. In TPP, however, the classroom is 'virtual' and formal learning takes place through engagement with course materials, but relatively little is known about how TPP students actively engage with course materials. It is possible that successful negotiation of the TPP curriculum involves both formal and informal learning. For example, learners may collaborate and share information, individuals may seek guidance and clarification on academic matters from family members, additional resources may be accessed through the internet and so on. What happens' in the classroom' may therefore be a necessary but insufficient condition for learner persistence in TPP. One of the purposes of the current study is to explore ways in which TPP participants utilise available resources to enable persistence with study. Resources are both human and material and include social and cultural capital. An ecological perspective can be used to explain access and utilisation of the different types of learner resources that TPP participants use to persist with study.

2.5. Section Summary

An ecological theory of human development seeks to conceptualize the interactive effects of social and cultural practices as resources contributing to educational attainment. Individuals contribute to their own development through utilisation and adaptation of available resources to suit personal circumstances. One of the contributions of the current research to theoretical understanding of persistence is conceptualization of how self-initiated activities mediate learning in the short term within and across contexts. Accumulation of social, cultural and academic capital is inextricably linked and interdependent.

2.6. Higher education perspectives

2.6.1. Introduction

The previous section presented the key theories and concepts used to inform the current research. The purpose of the present study is to investigate the student experience of factors related to constraints and successful persistence with study in a pathway program (TPP). This section will present a review of factors identified in the research literature as barriers to persistence as well as those factors influential in determining persistence with study. Most of the literature is from the first year experience of undergraduate study but has nevertheless informed the present study.

Concerns about rates of retention and attrition in higher education, as well as the appropriateness of the linguistic terminology used to discuss the phenomenon, have been present since the massification of higher education beginning in the 1960s. For example, in the nineteen sixties in the United States a Harvard Educational review article reflected on forty years of research and the lack of evidence that attrition rates had risen since the nineteen twenties, disputing the 40-60 % estimates found in much of the contemporary research. The author of the review concluded that, in any case, most 'drop-outs came back' (Eckland 1964, p.405). There is still much debate about the accuracy of rates of attrition and the most appropriate index of measurement, but there is also a research focus into the factors that positively enable persistence with study as well as research that seeks to reduce attrition rates in institutions or on specific programs through interventions and support.

2.6.2. An Ecological Perspective

The literature relevant to successful persistence can be related to different levels of the ecological system, (see section 2.6.). At the macrosystem level there are government directives and legislation that drive policy direction within the field of higher education in Australia, UK and USA. For example, the Australian government target to enable 40% of 25-34 year olds to attain a bachelor degree or above by 2025 (AUSSE, 2011) has driven university policies and research initiatives within the Higher Education field. Meeting government targets in USA, UK and Australia for expansion of the sector has resulted in research initiatives to monitor performance

levels of universities in relation to target levels. Statistical measurements of retention rates have been used in USA since the nineteen thirties (Eckland 1964) and have been used to evaluate the success of universities in widening participation initiatives in UK (Johnston 2010). Reports based on Australian multi-institutional research (Hillman 2005; Krause et al, 2005; James et al, 2010; Coates 2011) have produced statistical descriptions of the way students engage with university study and have highlighted the success or otherwise of the sector in enabling participation by targeted equity groups. These types of reports can be viewed as part of the dialogue between government and universities or between the macrosystem and exosystem levels that have resulted in a research focus on 'causes' of attrition and concomitant learning and teaching initiatives to improve retention rates (Johnston 2010).

The majority of institutional studies, at the mesosystem (university) level, have focussed on the interaction between institutional factors and student characteristics believed to influence retention and persistence. A great deal of the research at institutional level has been driven by the policy 'need' to identify causes of attrition and suggest 'remedies' to be implemented to improve retention rates. (Hodges et al 2013). Mesosystem level research has also tended to measure the success of institutions in 'engaging' students to facilitate the social and academic integration of the student into the academic community. Although this type of research has produced a wealth of information about the factors associated with attrition, there has been relatively little research into how students experience these factors (microsystem level) or how the resultant constraints to persistence are overcome. In order to better understand successful persistent, research should take more account of the nature of student experiences of studying (Johnston 2010). While some research of the first year experience in Australian universities has adopted qualitative approaches to better understand the student experience of factors identified by research as influential in enabling persistence (Devlin 2011, 2014; Kift 2009; Lawrence 2005; O'Shea 2007, 2014; O'Shea & Stone 2011; Stone 2008), there has been very limited published research that has examined the student experience of studying on a tertiary preparatory program. Hence the focus of the present study is the student experience of constraints but also how students succeed in overcoming constraints to successful persistence with study in a tertiary preparation program (TPP).

2.6.3. Categories of Factors Constraining Persistence

A great deal of the research in the undergraduate literature has focussed the factors that have a negative influence on persistence, categorised in this study as constraints. For example, in a recent review of the research literature on online distance education, Lee and Choi (2011) selected 35 empirical studies and identified a total of 69 'dropout factors'. The reviewers then grouped and categorised factors as follows:

Table 2.1: Categories of factors related to withdrawal from study, adapted from Lee and Choi (2011)

Student factors	**Course program factors**	**Environmental factors**
Academic background Relevant experience and Skills Psychological attributes	Course design Institutional support	Work commitment Supportive environment

The review conducted by Lee and Choi (2011) presented a comprehensive survey of the research literature. Lee and Choi (2011) report that in the analysed studies student factors accounted for 55% of the 'drop-out', and Environmental and Course Program factors constituted 25% and 20% respectively. One major shortcoming of the research highlighted by the authors was the failure to examine the interrelationship among different categories of dropout factors. It is now widely accepted that it is the interactive effects of constraints that influence decisions about persistence with study rather than single factors. According to Lee and Choi (2011), future research needs to consider the nature and level of the course (for example, enabling courses) in conjunction with mode of delivery (online, blended learning, on campus, distance only). Factors related to the nature of the course and mode of delivery must be considered in conjunction with student characteristics to facilitate comprehension of the complexity of factors that influence students' decisions to drop out of courses. Lee and Choi also argue that there is a need for small scale projects, such as this one, to fill existing gaps in knowledge.

Lee and Choi (2011) also comment on the preponderance of studies that have adopted a quantitative approach. 77% of the studies analysed were of a correlational design with very few examples of qualitative or mixed method approaches, despite the opinion of the authors that these latter approaches are likely to produce results that more accurately reflect the complexity of social phenomenon such as study related behaviours. The claim by Lee and Choi (2011), that the majority of studies employ quantitative methodologies, echoes the view of Longden (2002) who also notes that many of the studies are descriptive in nature and atheoretical which makes interpretation of findings more problematical. Nevertheless many research studies, especially the large scale national studies that collate statistical data from a number of institutions, reflect the influence of Tinto's integration model. For example the studies by Yorke (2004), Yorke and Thomas (2003) and Yorke and Longden (2008) in the UK utilised aspects of Tinto's (1975) model of voluntary withdrawal to explain reasons for non-completion of studies at undergraduate level. The factors identified by this research were categorised into four broad groups (Yorke & Longden 2008 p.9):

- flawed decision-making about entering the program;
- students' experience of the program and the institution generally;
- failure to cope with the demand of the program;
- events that impact on students' lives outside the institution;

Although different terminology is employed, the categories constructed by Yorke and Longden (2008) are substantially similar to those of Lee and Choi (2011) and include student factors with that originate prior to enrolment (choice of program). Factors related to the student experience of interacting with the institution and academic ability, have received a great deal of focus in the research literature. This research will be discussed with reference to engagement and integration, terms which have been widely used in the literature to explore retention and attrition.

2.6.4. Engagement and Integration

Student experience of the program and coping with academic demands are factors related to social and academic integration. Tinto (2006) acknowledged that social

and academic integration are rather abstract terms that have been operationalised in different ways by different researchers, and the research focus should be on the student experience of engagement. Thus many of the large scale studies in Australia (Coates 2011; Hillman 2005; James, Krause & Jennings 2010; Krause, Hartley, James & McInnis 2005) have regarded engagement as a key issue in the first year undergraduate experience and use terminology derived from Tinto's integration theory to explain patterns of engagement associated with persistence. The only large scale study in Australia into retention and attrition in preparatory programs (Hodges et al 2013) also claims engagement with the program is a significant predictor of attrition, with low levels of engagement associated with increased likelihood of non-completion. The same report cites earlier studies by Hartley et al (2011) at University of Newcastle, and Whannel and Whannel (2012) at University of New England, both of which also claim lack of engagement is associated with program attrition. In each case engagement is used in the sense of interaction between institution and student, or between students, thus in relation to social and academic integration.

While it may be intuitively appealing to cite lack of engagement as a determinant of attrition, it is not of great value to the practitioner charged with increasing retention rates. There is no agreement about desirable levels of engagement or indeed what types of engagement are most beneficial in promoting persistence. There is also likely to be variation in the desire and opportunity for engagement especially in relation to social integration. From the student perspective, learning that success depends on an adequate level of engagement merely begs the question of what must be done (engaged in) to achieve success. It cannot be assumed that students know how to engage with tertiary programs or how to engage within the academic community, especially in preparatory programs. Research is needed to clarify how current students engage with study and why particular study patterns predominate. In addition, much of the research adopting this framework have either ignored or neglected the role of 'environmental' factors, which 'exaggerates' the role played by institutional factors.

2.6.4.1. Increasing Engagement

A number of universities have taken measures to increase student engagement and participation in an attempt to improve retention rates. For example, the Student

Success Program (SSP) at Queensland University of Technology (QUT) have a number of measures to identify students who are 'at risk' of failing to complete studies. Identification of risk factors include recording attendance at orientation, classes and tutorials, recording the failure to submit an assignment or receipt of a low score, or low participation in classroom activities such as Blackboard. In short, the program appears to consist of a series of monitoring activities used to locate individuals deemed to be at risk of non-completion and referring them to advisors who are tasked with encouraging students to engage more with study. (Quinn, Bennett, Clarke & Nelson 2012). Identification of 'at-risk' groups on the basis of prescribed patterns of engagement may succeed with some students but alienate others who may regard monitoring of activities as overly intrusive. Attaching a label 'at risk' because an individual does not participate in Blackboard classes, for example, may alienate some students who prefer to engage with study through discussions with a peer learner who has 'participated' in the class. Turn taking at attending lectures or other informal ways of sharing the workload are important forms of engagement that may not be recorded by 'monitoring' of formal activities.

Increasing levels of engagement in online programs presents additional challenges for universities. Lodge (2012) has proposed institutional reform through implementation of a principal tutor role, which combines the role of tutor with administrator, to promote a sense of connectedness between students and the university in online courses. Based on research with students on a first year psychology course, the author claims his research provides evidence for increased participation and engagement, improved levels of satisfaction and increased retention rates resulting from improvements in rapport between students and university staff. In a previous study, Lodge (2010) claimed that communication between students and engagement with the program is improved by use of social media, such as Facebook, for networking. Thus it would appear that engagement is enhanced by good communication between students and university staff, and institutions need to utilise multiple channels of communications to engage students who study online.

It should not be assumed that measures adopted to increase engagement or participation will automatically improve retention, however, especially on distance education and online programs where the attrition rate is higher in comparison to traditional classroom based delivery programs (Levy 2007). For example, measures

recommended to improve engagement in online programs include increased opportunities for student-instructor, student-student, student-content, and student-community engagement (Angelino & Natvig 2009). Intervention to encourage participation and active engagement may not, however, always have the desired effects. In an attempt to improve persistence rates in a distance education online program, Poelhubber, Chomienne and Karsenti (2008) introduced different forms of collaboration (peer interaction and collaborative learning activities) in selected courses. Not only did participation rates fail to increase significantly but persistence rates were higher in the control groups compared to the intervention groups. This suggests that improving retention by enhancing participation and engagement is not a straightforward matter. Indeed a review of student non-completion literature undertaken by Laing & Robinson (2003) concluded there is little in the way of explanations of the causes of non-completion or little justification or hard evidence for the strategies used to reduce non-completion. This cautionary note is echoed by Longden (2006) who argues improvements in short term retention as a result of pragmatic interventions to programs may not be sustainable unless causal relationships between the various factors and retention can be established within a theoretical framework.

A comprehensive review of the research literature pertaining to undergraduate engagement with study (Zepke & Leach 2010) made ten recommendations to improve participation, which included enabling 'minority' students to accumulate enough social and cultural capital to engage and successfully persist with study. Rather than assume that students know how to engage with study, including familiarity with the different literacies and discursive practices necessary for successful engagement, Zepke and Leach (2010) argue for a need for institutions to adapt their practices to suit the background of students. The point here is that universities should not expect engagement without providing the conceptual and communicative tools to enable successful participation.

2.6.5. Factors related to Student Characteristics

Student characteristics is an umbrella term used to include educational history, social class, age, gender and other demographic features of students. The need for more

research into student characteristics of students on pathway programs stems from evidence that people engage with tertiary education differently according to aspects of their background and it is important to know student characteristics so that institutional provision can match the needs of students (Clay, Rowlands & Packard 2009; Cullety 2006).

The government emphasis on widening participation and targeting of equity groups for inclusion in higher education has resulted in a research focus on particular demographics such as low-economic status, rural dwellers, students with disabilities and so on. Many of these groups have been classified as 'at risk' of dropout or failure to persist. For example James et al (2010) identified a number of factors assessed as indicators of risk; financial commitments, lack of parental understanding and social support, lack of preparation for university study and excessive hours of paid work. These risk factors are unevenly distributed across the student population with low SES, rural dwellers, first in family, and mature-aged students (over 25) more likely to be exposed to a combination of risk factors. For example, having significant family commitments is a risk factor of particular significance to rural students, female students and mature students over the age of 25 (James et al 2010). While it is useful information to know that mature aged female students with a rural residential address are statistically more likely to face multiple constraints at university, richer and more nuanced data is required to understand exactly how these constraints affects study. Research by Stone (2008), O'Shea (2007, 2014) and O'Shea and Stone (2011) provide narrative accounts of the student experience of study of first year undergraduate females, many of whom were first in family students from low SES group. This research has shown that female mature aged students face multiple constraints to successful persistence and have an experience of tertiary education that is qualitatively different from other student groups. This research focussed on the nature of disadvantage experienced in the first year of undergraduate study but no studies of a similar nature have focussed on the constraints faced by pathway students. There is therefore a need for research to focus on how categories of disadvantage relate to experience of study in pathway programs such as TPP.

Mature aged-students in general face constraints not shared with younger, more traditional university entrants. For example, they are more likely to defer or postpone studies because of fear of failure (James et al 2010). Students for whom English is

not the first language (NESB) are also likely to experience fear of failure as a constraint that influences persistence with study (James et al 2010). In addition to the need for support strategies the report highlighted a need for more information about the experiences and constraints faced by first year undergraduates. The present study seeks to partially fill the gap identified in the report by researching the student experience of the constraints to their successful persistence. Since many students with these particular characteristics or 'risk factors' are ultimately successful students, it is also important to understand how these students overcome multiple constraints to successfully persist with study. Knowledge of how pathway students overcome disadvantage and successfully persist with study will contribute to development of improved curricular and institutional support strategies, a need also identified in the report (James et al 2010). At present there is little published information related to 'at-risk' students on preparatory programs or how they manage to succeed with study.

2.6.6. Factors affecting Equity Groups

Many students in enabling and tertiary preparatory programs belong to the equity groups targeted by government for inclusion in the widening participation initiative (Bunn 2009; Clarke, Bull & Clarke 2004). While many of these students successfully complete pathway programs within the time limits determined by institutions others require a longer time frame and possibly repeated attempts to achieve personal learning goals. Factors commonly cited as influential in determining persistence and postponement of study are those related to time. For example, the study by Hodges et al (2013), focussing on factors influencing attrition in five enabling programs, found the student experience of time constraints was the most frequently cited reason. There was however the caveat that this problem is a 'complex phenomenon with a multiplicity of underlying causes' (p.6). Similar findings have been reported by Seary, Flanders and Palu (2008) and Muldoon (2009). Other reports (Hillman 2005; Krause et al 2005; James et al 2010 and Coates 2011) cite time constraints as significant factors in shaping the first year experience and note that time spent in paid employment is now part of the common undergraduate experience. While working up to16 hours per week is not considered to have a negative impact on study (13 hours was the average cited in the 2010 report) it was not regarded positively in the reports. This was largely because of the assumption that time spent in

employment is likely to reduce time spent engaging with study. Working excessive numbers of hours is likely to have a negative effect on study, although there is little agreement about the number of hours that constitutes 'too many'. The report also highlighted time pressures caused by other non-study commitments such as looking after family members, a duty that is likely to fall on female, mature-aged students. Despite the fact that females constitute a majority of participants in pathway programs (Cullety 2006), there is little discussion in the research literature of how paid and non-paid work commitments impact on study in pathway programs for mature-age females.

Whether time spent in non-study commitments negatively impacts study processes is also likely to be influenced by how efficiently and effectively study time is utilised. Again there is little agreement about the number of hours required for successful study which is a difficult calculation that is influenced by a number of factors including academic experience. It was surmised (James et al 2010) that paid work does not interfere with study success because students are self-regulated and good time-managers, a view that would be welcomed by Bedford (2009) who argued that good time management skills can compensate for time lost to study because of work commitments. On the other hand, some students who work excessive hours may be so time poor that even the best management approach cannot create enough time for study, and in any event, it may not be possible to improve time management skills through teaching (Adamson, Covic & Lincoln 2004).

Clearly, there has been considerable discussion in the research literature about the influence on study by the time constraints caused by non-study commitments. Time as a resource is inequitably distributed amongst the student population and there are university policies and practices that determine the time frame for assignment and program completion. Time constraints shape the nature of the study experience on pathway programs, but a detailed account of how students experience time constraints and the resulting effects on persistence, require further research. The current study seeks to make a contribution to knowledge by investigating if time constraints impact on study and how students on preparatory courses manage to overcome time constraints to successfully persist with study.

2.6.7. Factors related to Educational History of Students

Another category of factors considered an important influence on persistence is educational history, sometimes discussed as prior attainment. Some research suggests that the best predictor of 'success' in terms of educational attainment is 'previous success' (Budden, Hsing, Budden & Hall 2010). For example, Mills et al (2009) found that the most influential factor on first year academic performance was a high matriculation score, suggesting that success at high school predicts success at tertiary level. The majority of students on tertiary pathway programs, however, have very limited experience of success at school and therefore limitations related to prior educational achievements is considered an additional possible constraint to successful persistence. On the other hand, Abbot-Chapman (2013) suggests that length of time away from study is more important in terms of persistence than previous qualifications or academic experience. Many mature-aged students on pathway programs have not studied for many years since leaving high school and need to combine study with considerable non-study commitments. They are also more vulnerable to negative 'life events' that inhibit successful persistence (Hodges et al 2013).The variety of constraints related to educational history faced by mature-aged students at undergraduate level partially explain the relatively high rate of drop-out compared with younger counterparts who have more recent experience of formal education. On the other hand, mature-aged students are also reported to have qualities that provide comparative advantage compared with younger counterparts, such as ability to focus on task and manage time more effectively. Mature age students who manage to persist tend to achieve higher grades and express higher levels of satisfaction with the tertiary learning experience (James et al 2010; Krause et al 2005). The current study will provide more insights into differences in the way mature-aged pathway students approach and experience study in comparison with younger age students with more recent, but not necessarily richer, educational experience.

Successful persistence with study does not necessarily require success in terms of high grades but there is research evidence to suggest that educational history prior to tertiary enrolment is important because it influences study practices post enrolment. The highest number of drop-outs on an online program researched by Pierrakeas et al (2004) occurred after completion of two assignments. The explanation offered by the researchers was underestimation of time and effort needed for tertiary study and in

particular, for the completion of assignments. It is possible, however, that high rates of withdrawal in the early stages of online courses reflects unfamiliarity with the literacies and other competencies necessary for successful completion. Technical competencies and digital literacies appropriate to online delivery modes of study are likely to become important to an increasing number of pathway students since student enrolments in online modes of delivery are becoming more common in undergraduate programs, particularly among students from rural areas, those with low SES backgrounds and part-time students (James et al 2010). Opportunity to attend support classes or tutorials have been found to increase rates of retention (Cheung & Kan 2002), which suggests those students who live in rural areas not within commuting distance to campus are disadvantaged relative to their urban dwelling counterparts. Approximately half of the students in the current study will be resident in areas that do not permit them to attend campus support classes.

Social Reproduction theory and Social Integration theory both argue that educational history is a major determinant of how prepared tertiary students feel when they commence tertiary study. The way in which schools and pathway programs prepare students for tertiary study should reflect up to-date university teaching and learning practices. The National Survey (James et al 2010) describes how students now spend less time on campus based activities and increasingly engage using information and communications technology (ICT). Participation in online discussion and engagement in peer to peer learning activities is becoming is an essential part of becoming a tertiary student. Students from targeted groups feel less prepared for university and unrealistic expectations about work load and standards are constraints to successful persistence (James et al 2010). Peer to peer learning and participation in online discussions with tutors and peers require different communication and literacy skills from traditional methods of teaching and learning. It can be concluded, therefore, that the educational history of targeted equity group students represents a considerable constraint to successful persistence but research is required to demonstrate how educational history impacts on persistence in pathway programs and also how students are able to overcome these constraints.

2.6.8. Social support factors and ‘fitting in’ at University

The metaphor of 'fitting in' at university has been utilised to depict the ease and degree of comfort students experience in adjusting to university culture and practices. Researchers, utilising Tinto's integration framework, have tended to discuss 'fitting in' at university in terms of social and academic integration. For example, Wilcox, Winn and Fyvie-Gauld, (2005) argued that successful persistence is dependent on making friends and developing a good social network. These authors claim social support is as important as academic integration in successful persistence, but the evidence for this claim comes from younger aged residential students. For this group of students, it is claimed peer support provides an emotional buffer in the absence of family and secures commitment to the institution. It has been argued that students from equity target groups have difficulty 'fitting into' the social context of university and unfamiliarity with the environment negatively influences some students to consider withdrawing from study. For example, a meta-analysis of 35 studies by Rubin (2012) found that socioeconomic class is related to social integration, with working class (WC) students less integrated in comparison with middle class students. It was further argued that integration is more important for WC for a number of reasons. In particular, WC students are less likely to receive social support for their higher education studies from family and hometown friends (Elkins, Braxton & James 2000). WC students are less likely to receive informational support from parents because their parents do not usually have any personal experience of the higher education system (Bryan & Simmons, 2009; Collier & Morgan 2008; Lehmann 2009).

The relevance of this information to mature-aged pathway students is questionable. Most mature-aged students have families of their own and the idea they might depend on advice from parents is not realistic. In addition, there is very little evidence that traditional students, even those who attend elite universities, receive practical advice about tertiary education from parents, whose experience is likely to be dated to say the least. The advantage gained by elite students can be obtained through secondary education. In other words, preparation for university, in terms of parental influence, is much more likely to be through selection of a secondary school that offers preparation for university. In addition, it is possible first in family and other non-traditional students are able to compensate for lack of preparation through other peer contacts once they have enrolled at university. Evidence from Rubin

(2012) appears to suggest the opposite, claiming that non-traditional students from equity groups lack the social capital to utilise this resource. Much of the research cited by Rubin was conducted in situational contexts where non-traditional students were in a minority and therefore had reduced opportunities for contact with peers from a similar background. In many pathway programs, however, non-traditional students are more likely to be in a majority. It may be easier to 'fit in' when more students are from a similar background.

It may well be the case that pathway students are disadvantaged by their educational history relative to traditional entrants but the nature of the disadvantage may be more cultural than social. It is possible that unfamiliarity with linguistic and literacy practices valued at university results in a feeling of not 'fitting in', and in particular unfamiliarity with higher education terminology may be a considerable constraint to successful study (Collier & Morgan 2008; Lehman 2009). Linguistic and literacy practices are important to cultural capital within Bourdieu's theory and it is possible the difference between language use at home and that appropriate to university may result in some students feeling 'out of place', especially if academics assume student familiarity with practices that in fact are quite alien. Also from a cultural perspective, O'Shea (2007) found that non-traditional undergraduate entrants faced different constraints from traditional new entrants based on differences in values and culture. First in family students have little prior knowledge and a poor understanding about the nature of tertiary study and therefore have false expectations. Much of the misunderstanding is related to language and literacy practices dominant at university which may be experienced as a 'foreign language' (Stone 2004) and result in a sense of alienation or not fitting in (O'Shea 2008)

There are many different types of disadvantage that impact whether people choose to attend university in the first place and which shape the tertiary experience once individuals decide to try it (Wilks & Wilson 2012). It is claimed that by year 9 children from disadvantaged backgrounds have on average fallen a long way behind their peers and the deficit continues to grow (Wilks & Wilson 2012). 'Fallen a long way behind' is a reference to academic achievement. Thus, whether students live in rural areas, are low SES or first in family to attend university, individuals appear reluctant to choose education or feel less comfortable with the choice if they do. This information is in accordance with the argument put forward by Bourdieu, that some

groups will be disinclined to attend university and less likely to persist if they do. Focus on constraints and the nature of educational disadvantage, however, begs the question of what enables some disadvantaged students to successfully persist. Success requires explanation just as much as failure, yet most of the research has focussed on constraints rather than how students overcome the constraints.

One study that did discuss successful persistence for members of low socio-economic groups (Thomas & Quinn 2007) cautioned against institutions making assumptions about the level of linguistic and cultural capital accumulated prior to enrolment. Thomas and Quinn (2007, p.131) argued that assumptions cannot be made that students and families will possess insider knowledge of HE and further that its systems, procedures and curriculum information should be made be transparent and understandable. Lawrence (2005) has shown the complexity and variety of discourse and literacy forms students may be expected to master at university. It is often assumed that students have already mastered some of these discourse and literacy forms by commencement of studies, and therefore instruction is not always provided and requirements are not always fully explicit. Lehmann (2012) argues that academic success requires mastery of linguistic forms that provide considerable advantage to middle class students because they are familiar with these forms by the time they commence university and academics assume this familiarity. Lehmann (2009; 2012) is one of the few researchers to research how disadvantaged students manage to overcome constraints and claims that having clearly defined goals and a clear plan of how to achieve them is crucial for successful persistence. Lehman also cites ‘luck and serendipity’ as factors in persistence, meaning chance encounters with people with cultural capital who can act as mentors and provide insights into the academic world. Even in the case of chance encounters, however, good communication skills are essential to take advantage of social and cultural capital, yet development of these skills is not always targeted by the curricula or a topic for research.

2.6.8.1. Institutional Support Factors

A dominant theme that runs through the research discussion of successful persistence is the role of support. The role of family and peer support has been discussed above, but institutional support is worthy of further discussion because it is often cited as a

‘solution’ to the problem of disadvantage in relation to improving tertiary educational opportunities for equity groups. One problem with the concept of support is lack of specificity of meaning or operationalisation of the term. Support has been defined as ’the university’s interaction with a student, whether it be with academic or service professional staff, that enhances the study experience’ (Coates 2011, p2). Thus it is anything and everything the university does on behalf of the student. It is important to students’ perceptions that support ‘meets their specific needs’ (p.3) and in so doing increases student satisfaction and consequently retention.

There is a great deal of variety in operationalisation of the concept of support. Thomas (2002) calls for a change in institutional habitus and nature of support, arguing for an increase in child care facilities in universities.

Improvement in retention rates as a result of advisement and orientation (Clay et al 2009; Pierrakeas et al 2004) support Silburn and Box’s (2008) call for ‘more’ and ‘better targeted’ transitional support. Walker, Gleaves and Grey (2006) argue for support to be more ‘personalised’ in the sense that assignment feedback comments should be more dialogical and less of a monologue, which might make it easier for equity group students who are unfamiliar with academic discourse. Nelson, Duncan, and Clarke (2009) argue for proactive personalised support early in the program for targeted ‘at-risk’ students. On the other hand, Simpson, Bramble and Panda (2008) argue that support which targets improvement in academic skills is unlikely to be successful and it would be better to provide support in the form of motivational training to increase rates of persistence. The majority of students do not seek support (Christie et al 2004) yet some students expect lecturers to be ‘on call’ to provide support (Anderson et al 2004). The report on retention and attrition in enabling programs (Hodges et al 2013) claims that low rates of awareness and use of student support services is one of the main factors that account for the relatively high rates of attrition in enabling programs. In some ways this is a surprising claim, since very few students who withdrew actually responded to the survey questions. It can only be assumed that the number of students who returned the survey (and persisted) expressed little awareness or use of support services. Thus it may be concluded that there was not a significant relationship between persistence and use or knowledge of support services. Despite lack of empirical evidence, however, it seems reasonable to assume that many ‘at-risk’ students do not utilise available support services and this

represents a missed opportunity to take advantage of a valuable resource that could facilitate successful persistence with study.

If support is vital for success, however, it should not be provided as an 'add on' service aimed at specific categories of students, support measures need to be included in the curriculum (Nelson & Kift 2005; Nelson, Kift & Clarke 2012). In fact, very little is known about how students in enabling programs use support mechanisms provided by the university or indeed how other sources of support are accessed or utilised. The current study will provide evidence of how students on a pathway program access and utilise support to successfully persist with study, and in so doing, will inform institutional practice of better ways of providing support through the curriculum.

2.7. Chapter Summary

The first part of this chapter discussed the conceptual framework underpinning the study based on three major theoretical approaches. The first approach discussed was social and academic integration theory derived from Tinto's (1975) model of student departure. Although this theory has been the most influential in shaping empirical research into undergraduate retention and attrition, it is not so useful for this study where the context of study is very different from the residential colleges of USQ populated by full time 'traditional' students. The derivative model of Kember (1995) was considered more suitable in terms of context because it does consider student background and family context as important factors that influence persistence with study. This model, however, is not well supported by empirical research and it is doubtful if the academic components of the model have predictive validity.

The social and cultural reproduction theory derived from Bourdieu is considered a useful model for explaining student constraints to persistence. The conceptual tool of habitus is a useful way of considering influential background factors such as educational history and the role of primary and secondary socialisation in educational success. Habitus determines cultural attitudes, habits and dispositions towards university studies that determine whether students wish to undertake higher education and shape study behaviours after enrolment. In particular, habitus influences whether students perceive they 'fit in' academically, socially and culturally. Thus persistence is determined by the congruence between the policies

and practices that determine the university habitus and the habitus of individual students. Social and cultural reproduction theory explains preparation for university by reference to cultural inheritance. Traditional students are prepared for university studies through a process of cultural inheritance that spans primary and secondary socialisation. It is therefore a very good theory for explaining the constraints faced by pathway students who have not had the same cultural history.

Ecological theory explains human development in terms of interaction between different levels of an ecosystem. Within this framework, persistence is influenced by social relations within the microsystem. In particular, the family is an important context for development. The family context can be conceptualised as a resource with the potential to constrain or facilitate persistence with study depending on management of social relations. The microsystem contains resources that can support efforts to succeed with tertiary study. Unlike the family habitus of social reproduction theory, the family context and other parts of the microsystem contains resources that can enable accumulation of forms of social and cultural capital that can facilitate successful persistence with study. This theoretical framework can therefore potentially explain student success even when students study under very difficult circumstances.

The second part of the chapter reviewed the empirical research related to retention and attrition. This part began with an historical perspective that correlates concern with drop-out and rates of attrition with periods of expansion of the Higher Education sector. Nevertheless, there appears to have been little change in the rates or patterns of retention and attrition and there is very little evidence to support the view that periods of expansion in higher education has led to increases in the attrition rate. The current period of widening participation in the university sector has focussed on improving access to university for certain targeted groups, in particular deemed to be socially and educationally disadvantaged relative to traditional university entrants. There has been a relative wealth of research devoted to increasing persistence rates in undergraduate programs but very little attention has been paid to pathway programs such as TPP. Nevertheless, much of the literature on the first year experience of undergraduate study is considered relevant to this study because research has highlighted a number of factors that influence persistence with study and these factors are relevant to pathway programs.

There appears to be general agreement in the research literature that factors influencing persistence can be categorised into student factors, university program factors and environmental factors. Student factors include educational history and relevant experience, while university factors include program design, institutional support and 'university habitus'. Environmental factors include the amount of time students spend in non-study activities, especially employment and 'home' responsibilities (paid and unpaid work) and the extent to which the home study environment is supportive.

Large scale studies, such as the periodic national studies of student experience of first year undergraduate study in Australian universities, have focussed on patterns of engagement to explain why some students appear to successfully transition and adapt to university study while others appear to be 'at risk' of dropping out. It is argued that engagement with the teaching and learning community of the university increases social and academic integration, thus promoting persistence with study. A great deal of research focus has therefore sought to identify ways of increasing student engagement with the institutional provider and others in the academic program. Although individual programs have reported improved retention rates as a result of measures taken to improve student persistence, there has not been any significant change overall to patterns or rates of retention because of interventions to improve student engagement with the academic community.

Other research on persistence has focussed on student characteristics such as educational history, social class, age, gender and other demographic factors that result in different student experiences of the transition process. Factors purported to influence persistence include the amount of time and effort students spend on non-study commitments. Research confirms that nowadays most students spend time in employment and on pathway programs many students are reputed to spend a great deal of time on carer duties and other related family responsibilities. The research literature is equivocal, however, at assessing the impact of non-study commitments on persistence. The current study therefore seeks to add to knowledge about how paid and unpaid work commitments impact on persistence on a pathway program.

Educational history has also been identified in the literature as an important influence on persistence. Evidence suggests previous success in educational attainment is

predictive of tertiary persistence, but this is of limited relevance to this study because TPP students are characterised by a lack of educational attainment in terms of formal study and qualifications. Nevertheless, educational history is still important in the context of the current research because educational experience prior to enrolment shapes expectations about the nature of tertiary study and influences patterns of engagement post enrolment. Research evidence suggests many undergraduate entrants underestimate the time and effort required to match academic requirements.

This chapter has also shown that some research has considered the role of cultural background as an influential component of student characteristics that shape the transition to university experience. Cultural inheritance shapes expectations that can result in perceptions of 'fitting-in' at university. Some researchers have concluded that families of targeted equity groups do not have the forms of social and cultural capital necessary to support non-traditional university entrants compared to traditional university students. Students who lack support or cultural 'nouse' tend to have difficulties 'fitting-in' at university and perceptions of not belonging can lead to early withdrawal from the program, especially if students are unfamiliar with dominant university literacy and discourse practices that are included in the preparation of more traditional students.

'Support' is a dominant theme that pervades the literature on student persistence. Although there is general agreement that support is necessary for improvements in retention rates, there is little agreement about operationalisation of the term support. Nor is there agreement about the best form of support or who should be responsible for providing it. Some researchers have called for additional or improved university support systems to facilitate the transition of equity students while others lament the fact that students tend to ignore this important resource. This has led some researchers to argue that support should not be an 'add-on' targeted at 'at-risk' students, but should be integrated with the curriculum and should underpin all university policy and practice related to equity groups. Clearly support is likely to be a major factor in successful persistence of pathway students since they are by definition educationally disadvantaged in terms of educational history and attainment.

Thus the focus of the present study is the way in which successful students are able to manage constraints to persistence despite studying under conditions that are sometimes extremely difficult. Although there is a great deal known about the barriers to higher education faced by non-traditional students, there is very little published information about how pathway students are able to overcome disadvantages and successfully enter undergraduate studies. The following chapter will present the research approach used to explore this issue.

Chapter 3: Research Approach

3.1. Introduction

This chapter discusses the research approach adopted by the study. The term research 'approach' is used in accordance with the explication of the term outlined in Creswell (2013) to refer to the process of planning and procedures adopted in a research study that include broad philosophical assumptions to detailed methods of data generation, collection, analysis and interpretation. Different terminology is used in the research literature to describe the research process but the convention for reporting research is to include a number of stages or steps, with each stage dependent to some extent on the last (Dunne, Pryor & Yates 2005). In practice, the process of enquiry was spiral, with a continued moving back and forth between stages but for purposes of this report, the process will be described as a series of steps or stages.

The chapter will therefore describe the stages in this research project from philosophical assumptions through to ethical considerations that informed the entire research project. The chapter begins with a discussion of the pragmatic paradigm and the rationale for adoption of that particular interpretative framework. After discussion of philosophical assumptions, a rationale and discussion of the research design will be presented. Following the justification and discussion of the appropriateness of a qualitative dominant mixed methods design, the next section will provide a rationale for the collective case studies design. The procedures for data generation, collection, analysis and interpretation will follow before discussion of reflexivity, validity and ethical considerations.

3.2. Interpretative Framework

This section discusses the broad concepts that guided the research. Research conducted within a qualitative paradigm investigates the social reality of the way people interpret and make sense of their experience of the world. Social reality can be approached in a variety of ways, each of which has philosophical and practical implications. The section begins with a discussion of the philosophical aspects of pragmatism. It then goes on to discuss the research design which deals with the practical aspects of the study, including a discussion of the rationale for the use of mixed methods to answer the research questions.

3.2.1. Pragmatism

The interpretative framework that best describes the current study is pragmatism. Pragmatism is not committed to one particular view of reality and researchers have considerable freedom to choose methods that are best suited to the research objectives (Creswell 2013). Thus pragmatic researchers adopt or adapt methods, techniques and procedures typically associated with qualitative research (such as ethnographic procedures, phenomenology etc.) to suit the purposes of the study. A pragmatic approach allows for a combination of quantitative and qualitative approaches, for example, an ethnographic study that combines survey and participant observation as a means of data collection and generation.

The purpose of this study was to explore students' experience of constraints identified in the literature as factors that influence persistence with study. An additional purpose was to learn more about how successful students manage constraints and persist with study. A pragmatic approach influenced the study design and procedures for generating data. The setting for the research was a pathway tertiary preparation program (TPP) at a regional university in Australia, the University of Southern Queensland (USQ).

The researcher was also a teacher on the program which provided the context for the study (see section 1.3.3. chapter 1 and section 6.7 limitations of the study). Previous experience of teaching on the program alerted the researcher to the value of using responses to a number of assignment items as a source of evidence related to the student experience of constraints to persistence. A number of items in different assignments were considered relevant for this purpose and analysis of responses to these items, together with interview data, provided data on the nature of the student experience at different stages of program progression. For example, one of the assignment items provided an opportunity for students to discuss and reflect on a constraint they had experienced or might experience in relation to successful study on the program. Responses to this assignment item in week six of the program therefore provided a source of valuable data that directly addressed one of the research questions posed by this research project.

The present study also matches the criteria for a pragmatic framework because the researcher looked to different ways to collect and analyse data using the criteria of expediency (what works) to choose the optimal method. Pragmatists are more concerned with 'what works' in terms of the outcomes of the research project and in solutions to real world problems (Creswell 2013). The real world problem that provided the focus in this study was the lack of knowledge of student experience of factors that contribute to attrition in pathway programs and how successful students are able to manage those constraints.

Pragmatism is an eclectic framework that permits a combination of elements of alternative interpretative frameworks. According to Creswell (2013) pragmatism allows a realist ontology to be combined with a constructivist epistemology. This study adhered to a constructivist epistemology because the researcher assumed knowledge of the world to be constructed. Knowledge of student constraints to successful persistence with study is therefore a co-construction produced by researcher and participants. Thus the nature of knowledge produced in this study represents a co-construction of the experience of constraints produced by researcher and participants. The reality of the lived experience of participants in the study is an interpretative account of the student voice and experience that reflects the theoretical lens used by the researcher to conceptualise the experiences of students in the program.

The present study is also concerned with the nature of social disadvantage in an educational context and therefore the pragmatic approach adopted reflects an orientation to critical theory and social justice frameworks. Although participants were categorized in this study as 'educationally disadvantaged', because categorization is a necessary part of defining the participants in the study, the researcher attempted to respect individual differences and therefore did not utilize traditional categories of disadvantage, such as low SES, male/female, age, race or nationality, in collation and analysis of data. Such categorization routinely occurs in discussions of disadvantage within a transformative or postmodern interpretative framework and also within critical approaches.

3.2.2. Philosophical Assumptions

All interpretative frameworks contain ontological, epistemological, axiological and methodological assumptions. These assumption are discussed below in relation to pragmatism and its application in the present study.

3.2.2.1. Ontological Assumptions

Ontology refers to the nature of reality and being in the world, to the kind of entity that constitutes the social world (Dunne, Pryor & Yates 2005). Qualitative researchers accept multiple realities and assume this to be true of research participants and users or readers of the research (Creswell 2013). This study seeks to explore and report the multiple realities of students on the TPP program. It is assumed that these realities are constructed through lived experiences and social interaction, but at the same time it is acknowledged that realities are shaped by power and social positions of participants. Student descriptions of their experience of constraints using their own words, together with different sources of data, is evidence of different perspectives and multiple realities.

3.2.2.2. Epistemological Assumptions

Epistemology refers to study of knowledge construction and therefore includes claims about the nature of knowledge about ourselves and the social world and how claims to knowledge are justified (Dunne, Pryor & Yates 2005). Knowledge claims in this study are made in accordance with the interpretative framework of pragmatism, with knowledge construction justified in terms of the outcomes of the study. In the present study, methods were employed to explore the student experience of studying a pathway program in order to inform teaching and learning practice. The goal was to use the student perspective of experience of successful learning to better understand the factors that constrain or facilitate success and therefore improve pedagogical practice. All methods have advantages and disadvantages according to perspective but pragmatism focusses attention on the outcomes of a research project rather than the methods used to investigate the phenomenon (Creswell 2013).

An important goal of the present study was to inform practice rather than investigate the efficacy of a particular methodological or theoretical perspective. Thus from an ontological and epistemological perspective it is important to acknowledge that knowledge constructed through discussion of the findings from this study is an

interpretation of participants' subjective experience. This interpretation of 'reality' inevitably reflects the tools of research coupled with the world view and social position of the researcher. The 'voice' of participants is articulated by the researcher whose interpretation inevitably reflects not only his understanding of the theories used to interpret the participants' reported experience but also his experience as a former student and current teacher on a 'second chance' pathway program. Thus it is acknowledged that there are multiple ways of 'knowing', shaped by individual experiences of participants, including the researcher. Although the present study is predominantly a qualitative study that employed inductive approaches to data generation and analysis, deductive tools and evidence were also used to provide important context to the study. Thus knowledge claims made in this study inevitably reflect the mixed methods adopted and this eclectic approach to knowledge construction is best characterised by pragmatism (Creswell 2013).

3.2.2.3. Axiological Assumptions

It has been acknowledged in this section thus far that the researcher accepts the ontological possibility of a 'real world' but that it is not possible to have direct knowledge of it. Production of knowledge through this research reflects the researcher's understanding and beliefs related to the social world of which he is part. There is no claim to an objective position 'outside' the social world and it is acknowledged that the researcher is part of the social world that is the context of the study. The identity, interests and values of the researcher have influenced the research process and particularly the generation, collation and interpretation of data. This study attempts to provide a 'thick' description and nuanced account of students' experience of study and attempts to represent the views and values of participants. Nevertheless, it is acknowledged the voice of the researcher is evident in the selection of voices from 'the field' and in the construction of this report representing those voices included for selection. Rendering other person's stories in one's own idiom is an act of ventriloquism (Dunne, Pryor & Yates 2005) and representations of 'the other' is always subject to conditions imposed by the researcher.

Beliefs in the transformational possibility of education, a desire for social justice and equity, and a concern with empowering students to transcend the constraints placed upon them are all values that shape the researcher's approach and reconstruction of

the research process found in this report. This results in a ‘bias’ that permeates the research process reflecting the subjectivity of the lens used to interpret student experiences. Thus, reporting and discussing the findings of the study, although based on the reflection of participants with the aim of giving voice to their lived experience, inevitably reflects the interests, values and social position of the researcher.

3.2.3. Research Design

3.2.3.1. Introduction

Research strategies (Creswell 2013), strategies of enquiry (Denzin & Lincoln 2011) and logics of enquiry (Dunne, Pryor &Yates 2005) are examples of the terminology used to refer to a detailed description of the process of enquiry and an explanation of how the research procedures are designed to answer the research questions. The present study was designed to facilitate understanding of student experience of factors that influenced successful persistence with study. This study adopted an exploratory, convergent mixed method, collective case studies design. The rationale for the design will be outlined below, followed by a rationale for the procedures used to generate and analyse the data.

3.2.3.2. Rationale for mixed methods

To answer the research question I adopted a qualitative-dominant mixed methods approach. Convergent parallel mixed methods are used in this approach to merge quantitative and qualitative data that results in a more comprehensive analysis of the research problem. Convergent and parallel refer to the time sequence of data collection, and the integration of data types in the interpretation of the overall findings (Creswell 2013). Qualitative and quantitative approaches can be viewed as occupying positions at different ends of a continuum with mixed methods somewhat in the middle (Creswell 2013). The current study is a qualitative dominant mixed method approach and therefore lies towards the qualitative end of the continuum rather than the middle. The research strategies adopted for the current study were based on the philosophical assumptions of the researcher, an expedient research design and efficient and effective methods of generation, analysis and interpretation of data. Research strategies reflect a pragmatic approach to research in which solutions to the problem of enabling

successful persistence takes priority in determining the methods used to investigate the problem (Creswell 2013).

Furthermore, the decision to adopt a mixed method approach was informed by the researcher's understanding of the research literature pertaining to the topic and identification of 'gaps' in our understanding related to successful persistence with study. Although there has been a great deal of research into retention and attrition in undergraduate programs, the majority of studies have employed quantitative approaches (Lee & Choi 2011). Qualitative approaches have been used to explore the student perspective and experience of undergraduate study but there has been no equivalent study in pathway programs. The major study related to persistence in pathway programs (Hodges et al 2013) was a quantitative comparative study of processes and strategies for improving retention in five university enabling programs. Thus the adoption of a predominantly qualitative approach to the present study was considered best suited providing a student perspective of the experience of studying on one of the five university enabling programs (TPP) to provide a more nuanced account of factors believed to influence persistence in pathway programs.

Mixed methods approaches may combine quantitative and qualitative research methods, a mixture of different quantitative methods, or a mix of different qualitative methods (Johnson, Onwuegbuzie & Turner 2007). In the present study, a predominantly qualitative approach to data generation and analysis was adopted with collection and description of quantitative data utilized to provide background and contextual information. This approach was adopted on the assumption that a combination of elements of quantitative and qualitative approaches would maximise the breadth and depth of understanding of the phenomenon under investigation (Tashakkori & Teddlie 2010). Collection and collation of quantitative data was used to set the scene and provide background information related to factors reported in the research literature as important influential factors in retention and attrition in pathway programs. Part of the rationale for including both types of data in this study was to capture population trends and experiential details related to persistence within a group of students on a tertiary preparation program. A mixed approach may be considered appropriate when the researcher wishes to generalize findings to a population as well as develop a detailed understanding of the meaning of a phenomenon to individuals. In this kind of study it is recommended that the

researcher first surveys a large number of individuals and follows up with a few participants to obtain insight into their understanding expressed in their own voice (Creswell 2009, p18).

In summarising, the research design reflected the purpose of the study, to facilitate understanding of the student experience of studying on TPP with a particular focus on understanding the meaning of progressive influences on student behaviour related to persistence with study. Quantitative data was used to provide context and investigate convergences and disparities in the situational context of study likely to influence persistence with study. Qualitative data was generated to allow interpretation of student behaviour related to persistence from different perspectives and in a variety of contexts (Barbour, 2008)

3.2.3.3. Rationale for a predominately qualitative approach

Although the study is described as mixed methods in terms of data collection and analysis, the research design predominantly reflects a qualitative approach (Clark & Creswell 2008, p.209). This was because it was primarily concerned with meaning and interpretation as a way of making sense of participants' experiences of study and the meaning of their actions to themselves and to others (Willig 2012). In terms of the research process, the study was concerned with exploring students' understanding through generation of data. Data analysis was inductive and interpretations constructed from particular instances to general themes, with the researcher making interpretations of the meaning of the data from different theoretical perspectives. The focus of the study was the meaning of experience of students on a particular program of study that constitutes a closed system with an additional focus on the complexity of the situation. These considerations firmly locate the present research as a collective case study at the qualitative end of the quantitative/qualitative spectrum.

In addition, a qualitative approach was adopted to give more prominence to the student voice and to enable the researcher to interpret the lived experience of participants as students on a pathway program. In order to capture the temporal element to experience, the researcher used a longitudinal approach and a range of methods including document analysis in the form of students' records and information from responses to assignment items submitted at different stages of course progression. This data allowed the researcher to monitor changes in

perceptions, beliefs and reactions to changes in the situational context of study brought about by the study process. Data from assignments also informed the interviews conducted at the end of the study period when participants reflected on their study experience. Interviews were semi-structured with open ended questions or prompts used to facilitate dialogue between researcher and interviewee. All data sources were integrated during the final stage of analysis and discussion of findings. Thus the research design fits the criteria for a qualitative dominant mixed method collective case study with convergent integration of data.

3.2.3.4. Rationale for collection of quantitative data

Although this study is predominantly qualitative in approach, collection and description of quantitative data has an important role in establishing the context of the study and in the selection of participants. The research literature on persistence strongly supports the importance of context to the phenomenon under investigation and calls for descriptive accounts of student characteristics on enabling programs (Cullity, 2006; Krause, 2005). The current study assesses the effects of experiences that influence persistence and so the role of socio-economic and cultural context in shaping decisions are important considerations in gaining knowledge about personal accounts of experience and how members of the group live their lives (Willig, 2012). According to the research literature (Hodges et al 2013; Muldoon 2011) time constraints are commonly reported as having a negative influence on persistence. Evidence suggests (James, Krause & Jennings 2010) that tertiary students are now much more likely to be employed either part-time or full time compared to the past. In addition, a characteristic feature of students on TPP, and other pathway programs, is the large number of mature aged women (Clarke, Bull & Clarke 2004; Cullity 2006) who may have both employment and familial responsibilities. Thus it is likely that any intake of new TPP students will have substantial non-study commitments likely to influence students' perceptions of how much time they can spend on study.

One of the aims of the current study was to provide a more detailed and nuanced account of how constraints impact on the study process. Given the information in the literature that some students were likely to spend time on paid and unpaid work it was therefore considered expedient to gauge the amount of time students expected to spend on study in relation to time spent on non-study commitments such as

employment. Questions that asked students to estimate the amount of time likely to be spent on study commitments and non-study commitments were included in the first orientation assignment completed within a few days of commencement of TPP. Collection and analysis of data pertaining to responses to these particular items were therefore used to quantitatively describe important aspects of the study context. Other questions in the assignment asked student to rate their level of confidence in relation to meeting academic requirements. This was considered an important aspect to measure initially as the research literature also informs us that previous educational experience influences future study habits and approaches.

Another contextual feature of enabling programs that is reported in the literature is the diversity of backgrounds that characterises the population of enabling programs such as TPP (Cullity 2006; Hodges 2013; Muldoon 2011). Collection and analysis of quantitative data is the most efficient way of capturing and displaying the diversity of background characteristics of the TPP cohort. Analysis of quantitative data was not employed to measure variables, or to verify hypothesis or existing theories, as would normally be the case in a postpositivist research approach The purpose of the quantitative phase was to provide an overview of the context for the present study and in particular provide information about the characteristics of the group in terms of expectations regarding study in addition to biographical information.

3.2.3.5. Rationale for a case studies design

Although there is variation within the case study literature about definition and categorisation (Denzin & Lincoln, 2011; Stake 2005; Yin 2009) case study research may be broadly defined as a qualitative approach with a focus on a real life bounded system (Creswell 2013). A case studies design was considered the most effective way of answering the research questions in this study. Case study designs are used to provide the researcher with an in depth analysis of a program, event, activity or process (Creswell 2013). The present study is an in-depth analysis of students' experiences of studying on a particular university pathway program TPP. The purpose of the research is to explore the student experience of factors related to persistence with study. The student experience of study, bounded by the time frame set by the university for completion of the program, is therefore regarded as a process bounded by time and space, one of the defining features of a case-study design

(Creswell 2013). A collective case study design is considered appropriate for the purposes of this study because it involves the study of several cases, thus allowing for a better understanding of the student experience of attempting to successfully persist with study.

Case study research begins with identification and selection of case. In the current study the case is constituted by a group of students that can be described (bounded) by the parameters of the TPP program in which they are students for a specified time. Case study research is ideally conducted to investigate real life cases that are in progress (Creswell 2013). Cases can be conceptualised as specific instances of a phenomenon, in this case, the phenomenon of the experiences of non-traditional students on a university pathway program. In order to obtain an in-depth understanding of the phenomenon the researcher analysed quantitative and qualitative data from different sources, including interviews and responses to assignment items and 'posts' on the online student forum.

Use of multiple sources of information is a characteristic of good case studies (Yin 2009). In this study the research process was also informed by personal and professional experience, literature from teaching and learning, relevant theoretical literature, as well as interviews and analysis of responses to different assignment items. In addition, the researcher analysed and compared multiple cases to gain better insight into the phenomenon. The researcher used a holistic cross case analysis design to identify issues and themes within each case and then compared cases in order to identify common themes (Yin 2009). It was considered important to identify common themes in order to present a deeper and more layered understanding of the students' experiences. An additional reason for identifying emergent themes was to illuminate the complexity of the phenomenon of student persistence and allow multiple perspectives of the reality of the experiences described in each case. While the study of multiple cases has been criticised for diluting the overall analysis (Creswell 2013), selection of a large number of cases for holistic cross-case analysis has the advantage of allowing common patterns of experience to emerge in addition to highlighting important differences of experience (Stake 1995; Yin 2009).

3.2.4. Selection of participants

Evidence from Clarke, Bull & Clarke (2004) illustrated that TPP students tend to be predominately female, mature aged and from low SES and rural backgrounds. This study did not seek to group students according to socioeconomic categories or provide demographic details of the cohort. The present study was to include a representative sample of the student cohort based on responses to the items included in the first introductory assignment. The items constructed by the researcher and included in this assignment did not attract marks or affect the grade awarded and it was made clear in the assignment instructions that students were free to answer or not. Research questions in the assignment assessed student expectations of their time commitments in relation to study as lack of time for study was reported in the literature (for example, Hodges et al 2013) as an important constraining factor in persistence with study amongst students in enabling programs. Selection of participants was therefore based on criterion sampling.

3.2.4.1. Criterion sampling

Different purposive sampling strategies (Creswell 2013, p.158) were used at different stages of the research. For the first phase of quantitative research criterion sampling was used to attract as many participants as possible that would provide specific characteristics of the student cohort. The questions in the orientation assignment in week one was an opportunity to collect data from a large number of students. Since all students returning this assignment were considered active participants in the program and therefore potential participants in the research, they met the initial criterion for inclusion in the study. This sample was not expected to consist of the entirety of students completing the initial assignment because it was anticipated some students would not wish to participate and would exercise the right not to consent or by not responding to the assignment items that were included for the purposes of this study. In fact, the vast majority of students consented to participate in the study.

3.2.4.2. Random stratified purposeful sampling

Random stratified sampling strategies are employed when the purposeful sample is considered too large and the researcher seeks to include groups to facilitate comparisons (Creswell 2013). The number of students who participated in the initial phase of the study was considered too large for qualitative phases of the research and therefore a purposive sampling framework was constructed for use in phase two of

the research. The main purpose of constructing a sampling framework was to ensure representation of subgroups that would provide a basis for comparison in relation to the influence of time constraints (Creswell 2013). Analysis of the data from the first phase of the study showed that many students spent considerable time and effort on non-study commitments and therefore this was likely to be a salient feature of the study experience for a large number of students in the cohort. On the other hand, there were many students who had very few commitments related to paid and unpaid work and therefore it was important to ensure the sampling framework was sensitive to this variation. In addition, criteria for sampling particular characteristics were also based on the literature on student persistence, and especially the finding by Hodges et al that persistence is negatively influenced by time constraints in relation to employment commitments. The latter study represents the major study into retention and attrition in pathway programs in Australia. Previous research by Bedford (2009) had also identified 'environmental' influences as important to student persistence. Furthermore, the researcher's experience of teaching on the program, coupled with discussions with experienced colleagues, all suggested that time constraints related to non-study commitments was likely to be a major consideration for the TPP because of the large group of mature-age learners. Thus sampling framework was designed to allow selection of cases with variation in the amount of time spent in non-study commitments (Creswell 2013).

3.2.4.3. Procedure for construction of sampling framework

All students who consented to participation and who had submitted the introductory assignment were sorted into groups according to the anticipated number of hours to be spent in study. This produced four groups, classified as very low (0-10 hours), low (11-20 hours), medium (20 -30), high 30-40 hours and D/K (don't know). The number of participants in each group was totalled to obtain the numbers in each group.

Each of the groups was then further sorted according to responses to items measuring anticipated time spent in non-study commitments, principally employment and family related duties. For the purposes of sampling the number of hours in employment was added to the number of hours in family duties to provide the anticipated time in hours spent in non-study responsibilities. Non-study

responsibilities were then classified as low, medium, high and very high using the same index of measurement as time spent on study. A sampling framework was constructed by cross matching the different categories of anticipated study time with the different categories of non-study time. In order to maximise the diversity of the sample population secondary criteria were applied, relating to mode of study (onsite and external), age and gender. The framework is shown in table 3.1.

Table 3.1. Sampling framework

Study hours	**Low non-study commitments**	**Medium non-study commitments**	**High non-study commitments**	**Very high non-study commitments**
Group A Very Low study hours 1-10	1	2	3	4
Group B Low study hours 11-20	1	2	3	4
Group C Medium study hours 21-30	1	2	3	4
Group D High study group 31-40 hours	1	2	3	4
Group E Don't know	1	2	3	4

Invitations to participate in the study were emailed to all students and only those who provided written consent were included. Student ID numbers were used to match assignments with the corresponding entry on the spread sheet containing data related to anticipated hours of study and non-study commitments. The numbers of students placed in each group was proportionate to the total.

The sampling framework was used to select participants for the third phase of the research, the interview. The framework provided a list of possible interview participants. An email was sent to all potential interviewees seeking consent to participate in this phase of the research. Although participants had provided consent to participate at the first phase of data collection, it was considered ethical to invite participation for the third phase because of the time lapse between the first and third phase during which students may have changed their minds about participating in the research. Selection of participants for phase three of the study also employed snowballing strategies. Information about the study raised awareness and interest from a number of former TPP students who indicated a desire to participate in the study. The names of these individuals were added to the list of possible interviewees on the basis they would be a rich source of information and add credibility to the sample.

3.2.5. Collection and analysis of quantitative data

The quantitative data was generated from a set of questions included in the TPP first assignment completed within the first few days of program progression. The questions in the introductory assignment are designed for student orientation. The questions included for the purposes of this study were designed to encourage reflection on the situational context of study and consideration of the anticipated demands of tertiary study. The questions constructed by the researcher and included in the first introductory assignment are included below.

Please note there are no 'correct' answers to this task. Please answer by writing the question number followed by the letter A-E to indicate your choice from the available options.

1. Please write your age range

A *Under 20* B *20 – 25* C *26 – 30* D *31-35* E *+35*

2. While studying TPP how many hours per week will you spend in **paid employment?**

A *0 -10* B *11-20* C *21-30* D *31- 40* E *over 40*

3. While studying TPP how many hours per week will you spend on **family commitments?**

A *0 -10* B *11 -20* C *21 - 30* D *31- 40* E *over 40*

4. How many hours per week on average will you spend on **TPP study activities?**

A *0 -10* B *11 -20* C *21 - 30* D *+30*
E *I do not know*

5. In order to find time to study, I will most likely do **one of the following**:

(Please write the **most likely** option)

A reduce the amount of time spent on leisure activities
B reduce the number of hours I sleep
C reduce the number of hours on family commitments
D reduce the number of hours I work
E have no idea where I will find the time

6. How confident are you that you will be **able to cope** with the following aspects of TPP

For this question, the letters mean:

A not confident B quite confident C confident D very confident

I. Amount of background reading required A ☐ B ☐ C ☐ D ☐
II. Assignment deadlines A ☐ B ☐ C ☐ D ☐
III. Computer related tasks A ☐ B ☐ C ☐ D ☐
IV. The study skills required of you A ☐ B ☐ C ☐ D ☐

V. The amount of time required for study A ☐ B ☐ C ☐ D ☐

VI. The degree of difficulty of the course A ☐ B ☐ C ☐ D ☐

7. What is the most likely **source of support** for you during your studies?

A family member B USQ staff C other TPP students
D a work colleague E friend

Questions one to five produced data pertaining to expectations about the time and effort students expected to commit to study. Question six measured levels of confidence in coping with different aspects of meeting USQ and TPP requirements. Question seven relates to likely sources of support.

The questions reflect assumptions of the researcher that student expectations shape future behaviour. The assumptions also reflect the researcher's understanding and interpretation of the research literature pertaining to factors likely to influence persistence and withdrawal from study, and previous experience in teaching on the program.

Data from responses to relevant questions in the first assignment were entered onto an excel worksheet. Students who had formally enrolled but did not complete the orientation assignment or any other assignments thereafter, were classified as non-participants for the purposes of this study. One of the aims of the study is to provide an account of student experiences of studying TPP and it was considered that non-participants did not have any meaningful participation or experience that could inform this research. The data entered into the spreadsheet was then analysed by frequency counts and the results based on descriptive data was represented using charts.

3.2.5.1. Phase one of collection and analysis of qualitative data

Generation of data for the qualitative phases of the study are described as follows. Phase one consisted of analysing responses to an assignment item completed by

students in week 6.The intended outcome of phase one was to identify possible participants in the final phase of data collection (interviews) and collect more detailed information about factors pertaining to persistence. To achieve these outcomes the first phase of qualitative analysis focussed on responses to an assessment item inviting respondents to describe a constraint that has been, or might be faced, related to TPP study. The assignment was completed in week six and the data collected by the researcher as soon as possible thereafter. The procedure for collection and analysis of data proceeded in 3 steps, based on Creswell (2009, pp.183-187).

Step one

The purpose of step one was to ascertain the range and frequency of constraints as reported by students. Step one began with organisation and preparation of the data. This involved multiple readings of the relevant part of each individual assignment and identification of key words and phrases used to describe constraints. There was no attempt to superimpose or interpret meaning at this stage. If a student reported a time constraint related to low motivation, for example, the constraint would be recoded as 'low motivation' but it would also be noted in brackets that low motivation was experienced as a time constraint if that reflected the actual response. Information from individual responses, including the key words used, was entered into a spread sheet, as follows:

Table 3.2 Range and Frequency of Reported Constraints (week 6)

Group and ID Coded to allow identification by researcher only	Constraints Key word (s)used in response	Consequences Key word (s) identified in response	Strategies Key word (s)identified in response	Comments Researcher's comment

Analysis of each case included an observation by the researcher related to course progression to check the respondent was still in the programme and also a comment

related to potential for inclusion in the final (interview) phase of the qualitative analysis

Step two

The purpose of step two was to enable further analysis and improve validity of the study. Copies of responses were collated and passed to a colleague familiar with the assignment. She was asked to underline the key words used to describe the constraint. The key words identified by my colleague were then compared with those entered into the spreadsheet by the researcher. Differences of opinion in relation to the nature of the constraint were discussed and resolved by mutual agreement.

Step Three

The third stage was an embedded analysis (Yin 2009) focussing on constraints and student responses to the constraint. 'Key words' were reanalysed and grouped as categories using the constant comparative method. The number of grouped categories was then reduced by further application of the constant comparative method. Finally the categories were entered into the spread sheet previously used to assign students to groups according to the sampling framework constructed by using data from the quantitative phase.

3.2.5.2. Phase two of qualitative data generation and collection

The purpose of the second phase was to gather more data pertaining to constraints reported at an earlier stage of course progression (week six, phase one). Data was generated from student journals and responses to an assignment completed in week twelve of program progression. Multiple readings of this documentary evidence focussed on the extent to which constraints reported in week six had successfully been managed and also whether different constraints had been experienced between weeks six and twelve. This phase also employed a constant comparison approach to data analysis by comparing information from assignments submitted in week six with information from the assignment completed in week twelve. Additional data generated from this assignment focussed on responses to questions that asked students to reflect on the study process, identify difficulties experienced, and assess

how understanding of the nature of tertiary study had changed as a result of studying on the program. This information was added to individual student profiles.

An additional purpose of this second phase was to facilitate further classification and refinement of the sampling framework by identification of typical cases, critical cases, extreme or deviant cases, and intense cases. Typical cases highlight what is 'normal' whereas critical cases facilitate logical generalization of information to other cases in collective case studies. Identification of deviant cases illustrate the range and diversity of constraints while intensity refers to cases that contain rich information about the student experience in relation to persistence. (Creswell 2013, p.158). This refinement of the participant selection process concluded this phase.

3.2.5.3. Phase three of data generation and analysis

This section will discuss the rationale for use of interviews, selection of interview topics, and procedure for data generation and collection.

Rationale for use of interviews

The main reasons for using semi-structured interviews as a means of generating data was that compared to alternative means of data collection, interviews could provide the researcher with richer information and insights not obtainable from other methods such as observation or survey (Dunne, Pryor & Yates 2005). In addition, interviews are more flexible and questions/prompts can be used to further develop points raised by either party in a dialogical exchange. Interviews are also an efficient means of gathering quotes and 'stories' of the student experience, which was central to the topic of investigation, and therefore are a way of giving representation to the voice of participants in the study. The researcher wished to explore sensitive issues such as participants' views about roles, responsibilities and relationships and their effect on study. It would be difficult to construct a questionnaire or survey instrument that could provide sufficiently sensitive in-depth information and, according to the pragmatic approach adopted to this research, it was considered appropriate to use methods judged to be the most effective and efficient, and semi-structured interviews satisfy that criteria. Furthermore, interviews allow exploration of topics unanticipated by the researcher. Since the researcher was professionally involved in teaching the program it was important to employ a research tool that might identify issues salient to the students' experience but unanticipated by the

researcher. This can be important in raising awareness of issues pertinent to disadvantaged groups by validating and disseminating their views (Banister 2011)

Selection of interview topics

Selection of material for inclusion in the interviews was relatively straightforward. The topics of constraints and how to overcome them provided the broad parameters for discussion. Information from student responses to relevant assignment items related to the student experience was also available for inclusion. The extent to which this information was relevant could not be determined beforehand since it depended on the nature of the information provided by the participant during the interview.

Although the focus of the interview was successful persistence with study, not all those interviewed had achieved their learning goals and therefore the interaction between researcher and participant had to be sensitive to this issue. Thus it was considered inappropriate to directly focus on achievement of goals but to invite students to reflect on their experience of studying on the program. It was therefore decided to invite interviewees to address topics rather than to answer specific questions. For example, the interview opened with an invitation to the participant to tell the researcher something about 'your' experience of studying on TPP. Topics of interest were prepared by the researcher in advance. If the participants discussed the topic without prompt then there was no need to introduce them explicitly into the discussion. If no information about a particular topic of interest to the researcher was 'volunteered' then the participant was prompted to say something about the topic by the researcher. For example, if no information was forthcoming about areas of difficulty the researcher would ask the participant to tell him about things which 'you' found difficult in the course, academically or otherwise'.

The list of topics were:

- Sources of support and help seeking behaviour
- Reflections on the experience of study and comparison with expectations prior to course commencement.
- Ways in which study impacted on other parts of 'your' life
- New relationships established through study or changes to existing relationships

- Experience of communicating with different university personnel and services
- What advice ‘you’ would offer a new TPP student based on ‘your’ personal experience
- Is there anything you would do differently if you had to study TPP again
- In what ways has study on TPP (not) prepared ‘you’ for undergraduate study
- To what extent did studying TPP enable you to attain your learning goals

Not all topics were introduced with exactly the same prompt since it was considered important for the flow of the interview to be as close to a ‘conversation’ as possible. The researcher was more interested in divergence and variety and less in convergence and replicability. The interview schedule was flexible and it was not considered necessary for all topics to be covered by all interviewees. In addition to preparation of topics for discussion, consideration was given to how much information was to be given to participants at the time of gaining informed consent for participation in the study. The researcher was as ‘open’ as possible about the aims of the research and began the interview with a verbal reminder of the information about the study that had been sent to participants by email and the researcher invited questions about the nature of the research or any concerns about participation. Interview participants were verbally asked if they wished to participate and verbally gave their consent for information from assignments to be used. No participants refused.

Procedure for data generation and collection

Interviews were conducted by telephone. Permission was obtained to record the interview using skype technology. Video conferencing was not employed because it was considered this might be too intrusive since many of the interviewees would be using a home telephone to participate. A research contract was negotiated with participants as part of normal research protocol and interviewees were assured of anonymity in the final report and informed that the original recording or transcript would be seen only by the researcher and supervisor. In addition to a record of interview, the researcher also made notes and comments about the conduct of the interview. It was considered that the transcript and recording were only part of the

research process and it is important for the researcher to include impressions, perceptions and emergent feelings as soon as possible after the interview. 'Field notes' can be important in informing the analysis but can also be a reminder of the assumptions the researcher brought to the analysis (Banister 2011).

The planning of qualitative interviews and procedures for generating data for this phase of the study were informed by an understanding of the related literature, but in particular by Banister (2011), Rubin and Rubin (2012) and Creswell (2013). Extensive planning for the interviews took into consideration the dual role of the researcher and ways in which this might bias or otherwise influence proceedings. It was considered important for the researcher to use a supportive tone and provide enough information about the nature and purpose of the interview to establish rapport and a respectful relationship of trust (Rubin & Rubin 2012). While it is acknowledged that the personalities of the interviewer and interviewee inevitably influence the interview process (Rubin & Rubin 2012) this influence could be reduced if the researcher adopted a supportive collegial tone during telephone interviews (Banister 2011).This was considered particularly important in interviews with participants who did not successfully complete TPP within the time frame set by the university. In order to reduce the influence of researcher bias and increase the validity of the data generated, bracketing was used to set aside possible biases (Rubin & Rubin 2012). Questions and prompts to be used in the interview were pilot tested with TPP students on the basis of convenience (Creswell 2013).

3.2.5.4. Summary of procedures for conducting interviews

It is considered that the procedures outlined above are in accordance with the recommendations made for successful interviews based on Creswell (2013). These include:

1. Determine research questions to be answered by interview
2. Identify interviewees based on purposive sampling
3. Choose a type of interview (telephone.)
4. Use adequate recording procedures
5. Design and use an interview protocol
6. Refine the interview questions through pilot testing on the basis of convenience

7. Determine place for interview
8. Obtain consent from participant
9. During interview use good procedures

3.2.5.5. Bracketing

The following table 3.3 shows the pre-conceived ideas about factors that influence student persistence that were bracketed to bring hidden assumptions and beliefs to the level of conscious awareness in an effort to reduce the influence of interviewer bias.

Table 3.3 Preconceived ideas about factors that influence persistence

TPP Negative influences on persistence	Positive influences on persistence
Low commitment to university study	Strong commitment to university study
Low motivation for social mobility	High motivation for social mobility
Low capacity to plan/present orientation	Structured planning/future orientation
Mature aged with multiple responsibilities	Few responsibilities and younger aged
Low academic aptitude	Natural aptitude for study
Habit of giving up	Sees things through to the end
Over-reliant on others	Independent
Competing interests/responsibilities	Single focus on study
Poor time managers	Good time managers

These beliefs and attitudes were constructed by brainstorming with colleagues who teach on the same program as the researcher. Reflection on the results of brainstorming produced the following list of 'common sense' assumptions about the factors that influence successful persistence with study on the TPP program.

3.2.5.6. Analysis of data

The purpose of the data analysis was to identify emergent themes which could be used to inform discussion and enable conclusions to be drawn. The analytical strategies used to identify themes were based on the process advocated by Creswell (2013).

1. The first step in the process was organisation of data by bringing together all information from interviews, assignment responses, journals and summary of academic records for each case.
2. A description for each case was then compiled. Description involved aggregating information from multiple sources to describe the experience of study from the students' perspective without using an interpretive lens to filter or interpret the meaning of the experience.
3. The researcher applied a within-cases analysis that required multiple readings of single cases to enable coding. The process of coding involved identifying and aggregating meaningful segments of text from different sources (for example, interview and response to assignment item). For this phase of the study, *in vivo* codes were applied to reflect the terminology used by participants in the study
4. The researcher then applied a cross-case analysis (Yin 2009) in which the codes applied to single cases were examined to discern patterns of commonality and difference.
5. The inductive process continued with reduction in the number of codes. This is achieved by aggregating several codes into broader categories or sub-themes.
6. The number of categories was reduced by categorical aggregation. (Stake 1995). This was a process of cross-case deconstruction and reconstruction of the categories in more meaningful ways. Themes emerged through the patterns and correspondence between categories. This form of analysis is based on Yin (2009) who advocates a cross-case synthesis as a technique to identify similarities and differences among the individual case themes. For the present study the researcher continued the inductive process to identify superordinate themes or generalization that may be applied to a population of cases.
7. Naturalistic generalizations were developed and applied to construction of the chapters (four and five) reporting and discussing the findings from the study

3.2.5.7. Interpretation of interview data

Interpretation has been described as the final phase, where the researcher reports 'the meaning' of the cases (Creswell 2013) or what has been understood about the

phenomenon, in this case successful persistence with study. In the present study, however, interpretation was not a distinct phase of the research process. Interpretation was integral to the whole process and permeated the data analysis phases. Initial coding was carried out by analysis of text segments constructed by the research participant and coded in terminology used by the participants.

This exercise, however, involved selection of key words and sections of text that were considered meaningful for the purposes of the researcher. 'Meaningful to the researcher' is partly defined by reference to the conceptual framework described in chapter 3. Thus the researcher adopted a 'binocular' approach to interpretation, perfectly in accordance with the wider pragmatic interpretative framework which determined how the research was designed and conducted. The binocular approach means interpreting each segment and piece of evidence through two different lenses. The first lens represents an understanding (interpretation) of the meaning of the evidence from the participants' perspective. The second lens was used to interpret the evidence from a theoretical perspective. The purpose was not to test theory but to use theoretical understanding to provide different perspectives on the evidence and therefore provide different views of reality or different views of constraints to successful persistence. Thus interpretation was not a separate phase but a continuous process with changes of focus at different stages of data generation and analysis.

The next section will discuss the importance of reflexivity and validity to the interpretation of the data.

Reflexivity is a process through which a researcher becomes conscious of the ways in which personal biases, values and experiences shape the research process (Creswell 2013). This has become an increasingly important part of qualitative research in recent years. The first 'textbook' on research methods in psychology used by this researcher in the nineteen nineties devoted sixteen pages to discussion of validity without mention of reflexivity in the entire text (Coolican 1990). By 2005, a text book published by the same educational institution (Open University UK), indexed forty-nine counts of reflexivity and one of validity. This information gives some indication of the importance of reflexivity in current research practice. The peppering of references to reflexivity throughout the latter textbook also draws attention to variation in approaches to discussing reflexivity in reports such as this

one. Some researchers choose to discuss reflexivity in one particular part of the research report while others, including this one, discusses the position of the researcher in the introduction and make reflexive statements at different places in the research report, such as the methods or the findings (Creswell 2013). Thus the discussion of reflexivity here will focus on the role and influence of the researcher on the methods of data generation and analysis used in the current study with a particular focus on the interview process.

There are issues of ethics and power that are particularly pertinent to use of interviews when the researcher is also a teacher on the program that provides the setting for the study. For ethical and other compelling reasons it is important the researcher discloses affiliations and personal reasons for engaging in the research. This forces the interviewer to consider issues of reflexivity in the research process beginning with construction of research 'questions', selection of participants, and the interview process itself. It was accepted that the dual role of interviewer and USQ academic employee must affect the interview process and influence responses by students. Some attempts were made, therefore, to democratise the interview by reducing the power imbalance normally existing between researcher and participant. A dialogical approach to interview process was adopted. Both parties were able to seek clarification and could direct the communication in a particular direction of interest. A collegial tone was used by the interviewer. Nevertheless, it is acknowledged that participants in the interviews may well have responded differently to the same questions had they been posed by a peer or personal friend rather than the researcher who was an employee of the university.

After the researcher had generated sufficient data for purposes of this study, the interview protocol allowed for participants to raise and discuss any issues related to future study plans. The disclosure that the researcher has previous experience of 'second chance learning', as a student, and as a teacher on pathway programs, encouraged comparison of experiences and sometimes participants sought advice about future study intentions. The researcher was happy to engage in such a dialogue, within limits, to promote a sense of equality and a desire that the interview should be mutually beneficial for researcher and participant. In addition, the researcher sought

to stress to participants the value of the contribution of their 'expertise' and the dependence of the researcher on the participant for providing access to reflections about the meanings of experience and insights into the cultural world of participants. This is not to imply that the researcher and participants shared the same research goals. Nevertheless, planning the interview protocol included consideration of how best to ensure that participants had an opportunity to seek information from the researcher in addition to the opportunity to voice their experience on issues of concern to this research.

It is recognised, however, that it is not possible to make the power imbalance disappear. The questions asked by interviewees were not included for analysis and reporting of findings. The research may be of no benefit to the participant and the experience which they voice is ultimately subordinated to the interpretative framework and theoretical lens used give meaning to the participants' contribution. Thus reflexivity and consideration of the nature of the interrelationship between participant and researcher was an integral part of the planning stage for construction of questions and interview protocol.

Validity

As the research project is a largely qualitatively dominant mixed method study the bulk of the study has been conducted in accordance with qualitative approaches to inquiry. There is no definitive strategy for establishing validity or reliability in qualitative studies and alternative terms such as 'understanding' and 'plausibility' (Wolcott 1990) have been used to substitute for validity. These terms are not synonymous with validity, but use of different terminology draws attention to the evolving re-conceptualization of what strategies researchers might employ to establish the trustworthiness of the research. An appeal to 'plausibility' and 'understanding' has some merit because trustworthiness evokes an image of sense making by someone other than the researcher. It could involve the participants in the study (member checking) or other stakeholders such as peers or examiners who are able to provide an external check of the research process. In a textbook of research methods in psychology, Coolican (1990) argued that case-study research had the disadvantage of being highly unreliable and while the strength of this design is the richness of the data, the weakness is lack of generalisability. The author also

regarded the closeness of the relationship between participant and researcher as a hindrance to objectivity but also argued a case study would be likely to produce a rich information source. Nowadays it is extremely unlikely that a qualitative researcher would make any claim to be 'objective' and the closeness of the relationship with participants in the case study, and immersion in the field, is generally regarded as a strategy for establishment of validity, not the opposite. Rather than claims to being objective, current practice is for qualitative researchers to provide a 'position' statement which clarifies researcher bias from the start (See chapter one, Introduction). Trustworthiness is further enhanced by reflexivity, involving open discussion in the research report of the subjectivity of the researcher and how the researcher interacts with material to make sense of a case. In accordance with the pragmatic philosophical approach to research adopted in the present study, this researcher has chosen to follow the advice of Creswell (2013), who suggests that new researchers should seek to employ at least two strategies for establishing the validity and reliability of a study. This researcher has chosen six to highlight. They are:

- reflexivity
- member checking
- rich, thick description
- transferability
- triangulation
- bracketing
- peer debriefing
- clarification of the position of the researcher

The first of these strategies, **reflexivity**, has already been discussed above, therefore the rest of this section will discuss the other strategies used to establish the reliability and validity of the study. **Member checking** requires participants in the study to 'validate' the researcher's understanding of the information generated through the research process (Creswell 2013)). Member checking is particularly important in emic approaches to case studies where the researcher's experience is used inductively to provide more contextually situated descriptions. In the present study the researcher summarised the information from the interview and associated

documentary evidence generated during the course of the interview. This summary was introduced at a particular stage in the interview process as a useful demarcation point for inviting participants to take ownership of the process by commenting on the summary but also by inviting discussion of topics related to tertiary education that were salient to the individual participant. It was considered unethical to take up the time of participants by expecting participants to verify the content of every transcript and corresponding analysis and interpretation of data. Participants were invited to engage in further discussion about the research if they wished at a later date and some participants expressed a desire to do so. Follow up telephone conversations focussed on preliminary analysis of the themes that emerged from the interviews with participants (Creswell 2013).

In ethnographic and case studies, **thick description** allows for an accurate representation of participants' lives (Yin 2009). Accuracy requires description of the voices, feelings and meaning of actions to participants rather than recounting only factual information (Denzin 1989). As Creswell (2013) points out, there is no standard format for reporting case studies and this included prescription about what constitutes thick description. In the present study, attempts have been made to provide thick description by providing details related to students' experiences that connect with the emergent themes in such a way that enables reader and stakeholders in the research to transfer meaning to other settings.

There is debate in the research literature pertaining to the generalizability of the findings from qualitative research. The term is more commonly associated with quantitative methods where generalizations are validated by formal procedures involving statistical analysis. In terms of qualitative research, Yin (2009) argues that theoretical generalizations are not appropriate in case studies because selection of cases is not based on replication logic. While it is true that replication of the present study is impossible because of different contexts, it is argued that this research provides a basis for understanding the experiences of students in pathway programs other than TPP. Thus **transferability** replaces generalisability as a measure of the validity not only of the findings but to the research process in its entirety. Transferability requires that users of the research are able to make sense of the study in a way that enables them to apply aspects of the study to a different setting. In the case of further research, it is anticipated the approach adopted in this study could

inform other research projects in other pathway programs. Thus ‘naturalistic’ generalisation is adopted as a strategy for establishing ‘validity’ in the current research.

Triangulation requires the researcher to compare different views of the same thing (Coolican 1990). There are a number of strategies for achieving this. In the case of the current study, triangulation involved analysing corroborating evidence from multiple sources, principally interviews and student responses to items in two different assignments. These three sources of evidence were gathered at different points in the research process but synthesised during interpretation and report writing. When researchers use multiple sources of data to construct themes they are triangulating information, thus adding validity to the research findings (Creswell 2013)

Bracketing is a technique to reduce the influence of researcher bias. It requires the researcher to set aside preconceptions and assumptions. As the researcher I consider this impossible to achieve for the simple reason that qualitative research cannot be ‘objective’. Bracketing is, however, a useful means of bringing assumptions and preconceptions to the level of conscious awareness and by doing so enables the researcher to generate data that is more authentic in representing the student experience. Careful consideration was given to the issue of bracketing for this study because of the dual role of the researcher. I was conscious not only of the opinions and beliefs about second chance education that I held as a result of personal experience of teaching and learning but also conscious of some of the beliefs of colleagues that would also inevitably have a contributing influence on the research process. Thus the assumptions and beliefs that have been bracketed for this study represent an amalgam of personal and professional dispositions that I have attempted to set aside in representing and interpreting the voice of participants.

Peer debriefing is a means of providing an external check of the research process. In the current research project, peer checking and debriefing provided a ‘reality check’ at different stages of the research process. The research was conducted under supervision by an experienced researcher who asked ‘hard’ questions of the researcher in terms of methods, meanings and interpretations (Creswell 2013). In addition, the research approach and methodology employed in the study was

presented at a peer symposium where feedback resulted in refinement of procedures. Peer guidance, feedback and support was also provided at conference presentations where preliminary findings were discussed by stakeholders. Although not strictly peer 'review', this research process was also informed by attendance at a number of workshops and symposia related to persistence with study, such as the 'First in Family' symposium (University of Wollongong, February 2015) where the approach and findings from more experienced researchers provided a gauge to measure the contribution of the present study to knowledge about widening participation and facilitating transition to university for disadvantaged students.

3.3. Ethical Considerations

Ethical considerations constituted a major part of the planning and implementation of this research project. The study required the approval of the University of Southern Queensland ethics committee before collection of data was allowed but in this case ethical consideration preceded and went beyond those required for formal ethical clearance.

There were ethical as well as pragmatic reasons for analysing data from responses to assignment items. The researcher considered it unethical to intrude unnecessarily into the lives of students who may well have experienced survey fatigue from the numerous questionnaires students are routinely asked to complete in connection with program evaluation. Thus the researcher was able to access good research material without intruding further into the lives of participants in the study. It would have been possible to conduct multiple interviews at different points in time but this would essentially have meant asking the same types of questions students had already answered in assignments and this was considered an unnecessary intrusion.

3.3.1. Reciprocity

Participants in this research discussed personal information and sometimes made disclosures of a sensitive nature. In addition, they consented to the researcher accessing data from assignment responses and study journals and used some of their most valuable resource, time, to participate in a study that might not be of direct benefit to them. Under these circumstances the researcher planned to reciprocate during the interview phase by taking time to address any study issues the participant may have. It is acknowledged this is a departure from recommended interview

procedure of ‘not offering advice’ (Creswell 3013, p.166) but this part of the interview was clearly demarcated and communicated to participants by thanking them for participation followed by a member check that the summarised information was accurate. Only then were participants invited to discuss study issues that concerned them. Participants were made aware that the recording had been stopped and the rest of the dialogue was not recorded and did not form part of the study. Not all participants accepted the invitation. During the part of the interview recorded for research purposes the interviewer contributed as little as possible to the ‘dialogue’ in an effort not to appear to evaluate or sympathise with the views expressed. The prompt ‘can you tell me more about X’ was frequently used to obtain richer information with the expression ‘thanks for that’ used to mark a transition to the next topic for discussion.

The following summary indicates the steps taken to ensure ethical considerations were applied to the planning and conduct of this research project. During the planning phase the researcher:

- Discussed ethical considerations with supervisor.
- Discussed research approach and sought approval from Director, Open Access College for possible use of assignment item responses for data generation.
- Considered sampling options
- Constructed preliminary list of interview topics
- Constructed participant information sheet and consent form
- Consulted with documentation and literature pertaining to ethical standards in research and in particular the National Statement on Ethical Conduct in Human Research (2007)
- Application for ethical clearance submitted to USQ Human Research Ethics Committee
- Application approved No.H13REA047

3.3.2. Summary of Ethical Considerations Applied to Procedures

- Prior to phase one of data collection, the researcher contacted all possible participants by emailing an information sheet and consent form to university email addresses.

- Prior to interview and use of assignment responses, likely participants were again provided with information sheets about the purpose and conduct of the research.
- Participants were informed the study was for research purposes conducted as part of a PhD project and was not part of any USQ data collection
- Data generation procedures and reporting procedures were fully disclosed
- During data collection, analysis and construction of the final report great care was taken to protect the identity of the participants by masking names and developing composite cases.
- Member checking information obtained in interview by presenting summarised account constructed by researcher to participants for approval of accuracy
- Participants informed how they could obtain results of analysed data and copies of resulting report.

3.4. Chapter summary

This chapter explained the research approach adopted. The rationale for choosing a pragmatic framework was because it allows freedom to adapt methods, techniques and procedures typically associated with qualitative approaches to be combined with quantitative methods. I explained that although quantitative data were collected to inform the findings, the study is best characterised as a qualitative dominant mixed methods collective case study. A case study design was considered the most effective way of answering the research question because it enabled an in-depth analysis of students' experiences of studying on a USQ pathway program. A collective case study was considered appropriate because it allowed analysis of several cases, to generate a range of data that provided a broader understanding of students' attempts to persist with study.

The chapter also explained methods used to generate and analyse data with a cross case analysis used to allow common patterns of experience to emerge in addition to highlighting important differences. It explained that different purposive sampling strategies were used to reflect the diversity and range of characteristics of the student cohort. The methods of data generation and collection were outlined with multiple sources of data used to strengthen the validity of findings and also to

illustrate the changing nature of the students' experience longitudinally. The chapter also discussed many of the ethical considerations relevant to the study. The following chapters will discuss the findings of the study, draw conclusions and consider the implications of the findings for the teaching and learning community.

Chapter 4: Constraints

4.1. Introduction

This chapter will discuss the TPP student experience of constraints to successful persistence with study. The chapter utilises the conceptual framework of Bourdieu's social reproduction theory to discuss constraints as forms of capital. Social reproduction theory is a useful framework for discussing constraints because the strength of the theory is its explanatory power in terms of the social and economic status quo and the role of education in preserving it.

The chapter presents an integrated discussion of the findings in relation to the research question: What are the constraints to successful persistence experienced by students on TPP, a pathway program to university undergraduate study? Quotes from participants have been italicised and indented. If quotes have been interwoven with commentary then the quote has been italicised only.

The chapter begins with presentation of results from questions in the first introductory assignment completed by students in the first week of study (see section 3.2.5. for details). Students' responses to these questions provide context for the findings from the qualitative phases of the study and provide information about socioeconomic and cultural conditions of TPP students (Willig 2012). According to the research literature, time constraints are important factors of influence in relation to persistence with study in pathway programs (Hodges et al 2013; Muldoon 2011). Findings from the initial student assignment will therefore discuss the amount of time students expect to spend on study and the number of hours expected to be spent on meeting economic needs associated with paid and unpaid work. Findings related to students' expectations and confidence levels related to capacity to meet academic requirements will also be presented.

Next, the chapter presents a typology of constraints based on key words used by respondents to describe a constraint experienced during the first six weeks of the study program. This information is based on qualitative analysis of responses to an

assignment question completed in week six of the TPP program. The question invites students to describe a constraint they have experienced during the program. Many students described multiple constraints and the typology reflects student descriptions of the constraints they experienced.

A third source of data stems from the assessment completed towards the end of the course (week 13 of a 15 week program). This data describes students' reflections about what they have learned about the nature of study at university. This qualitative data is integrated with quotations and extracts from interviews with students upon course completion or as soon as possible after withdrawal from the course in the case of students who did not complete. Data generated from interviews with students largely informs the discussion of constraints experienced by students.

Thus, triangulation is achieved through comparison of data generated from different sources at different stages of program progression (week one, week six, week thirteen, and upon course completion). Qualitative data was analysed using the constant comparison method. Emergent themes related to constraints are discussed using the concepts of forms of capital derived from Bourdieu's social reproduction theory.

Four main themes emerged as constraining factors. They are:

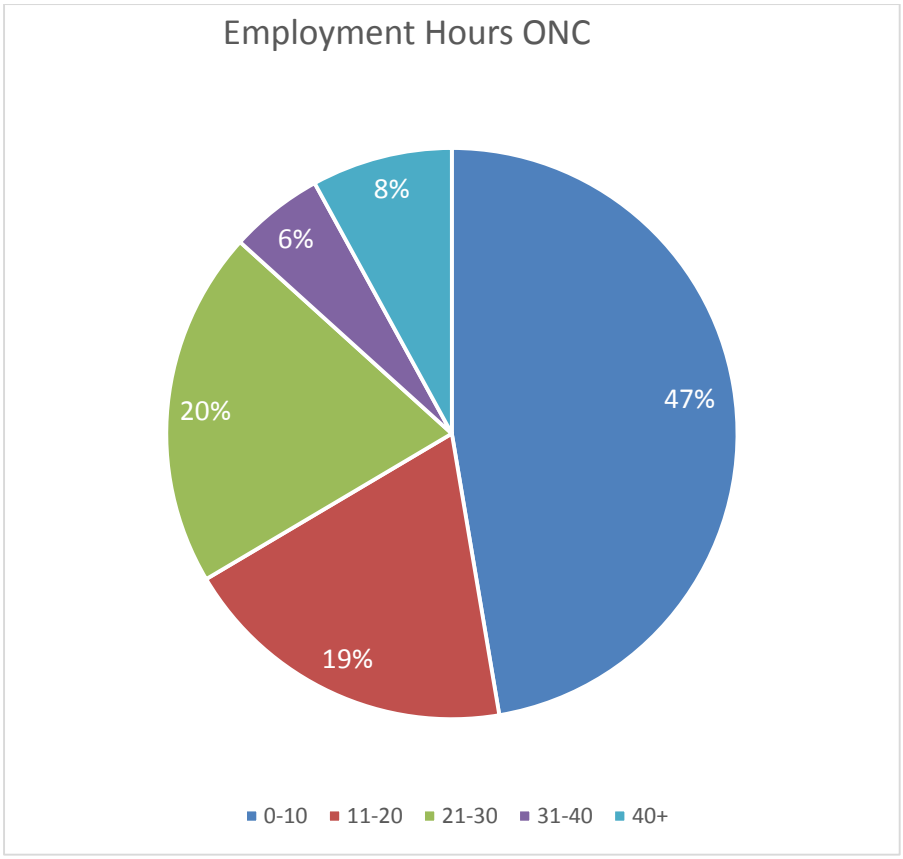
- Socio-economic constraints
- Academic constraints
- Interpersonal constraints
- Communicative constraints

4.2. Student Expectations

This section presents findings from student responses to questions in the introductory assignment. These responses provide information about student expectations of coping with the demands of tertiary study. Findings from research suggest that many pathway students struggle with balancing study and non-study responsibilities and experience difficulties in finding quality time for study (Hodges et al 2013; Muldoon 2011). This section therefore includes findings in relation to student expectations about finding enough time for study.

4.2.1. Paid and Unpaid Work

Figure 4.1shows the amount of time students expected to spend on paid (employment) and unpaid work (domestic and carer duties), based on information from an introductory assignment submitted by students during the first week. It should be remembered that all students have enrolled on a full-time tertiary program because there is no part-time option. The comparison is between external (EXT) and onsite (ONC) students. External students do not attend weekly onsite support classes provided at USQ campuses. Information in the diagram is based on data collected and collated from semesters one and two in 2013.



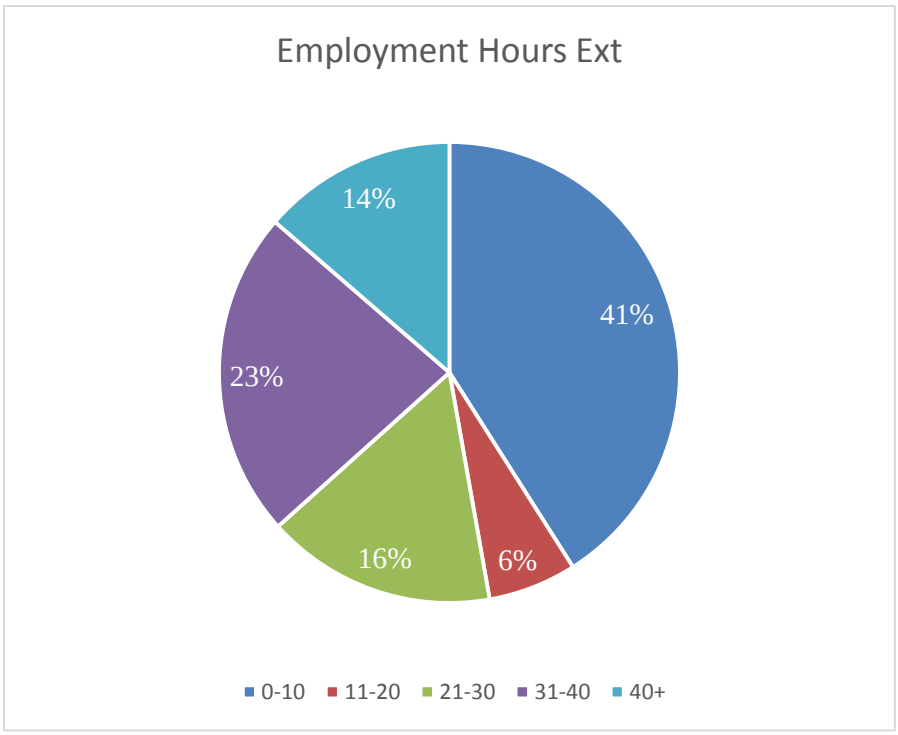
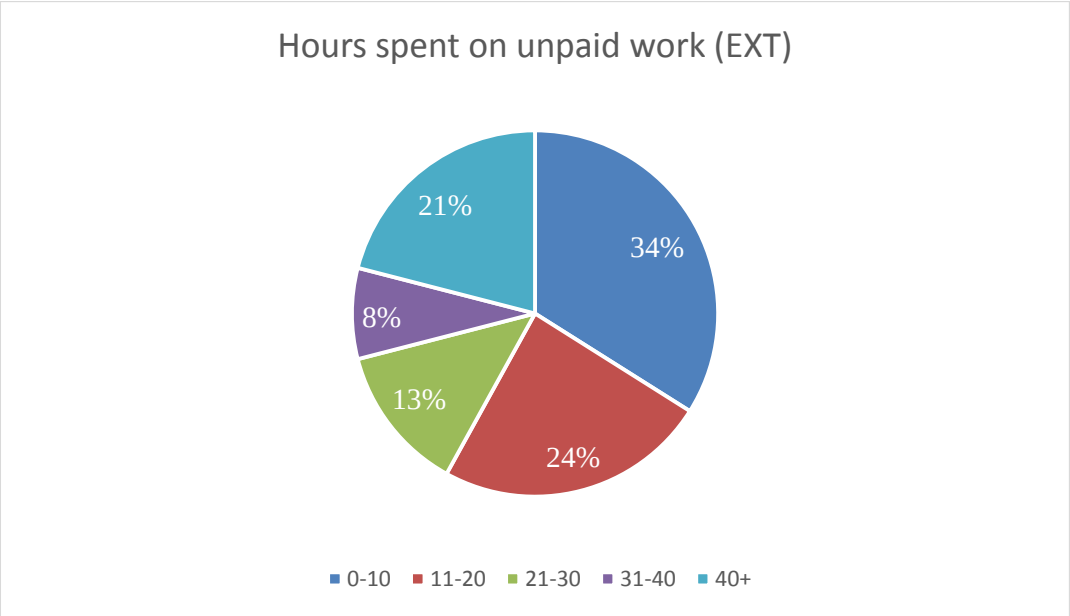


Figure 4.1. Number of hours students expect to spend in employment: percentage of external enrolled (EXT) and on-campus (ONC) students. N=722

The charts show the expected commitment to paid work (employment) at week one of course progression. The percentage of students who work more than 20 hours per week is 53% for external and 34% for onsite students. 37% of external students work at least a full time loading of forty hours per week compared to 14% of onsite students. Thus in terms of the research question, a substantial portion of TPP students work full time while enrolled in a full time tertiary study program.



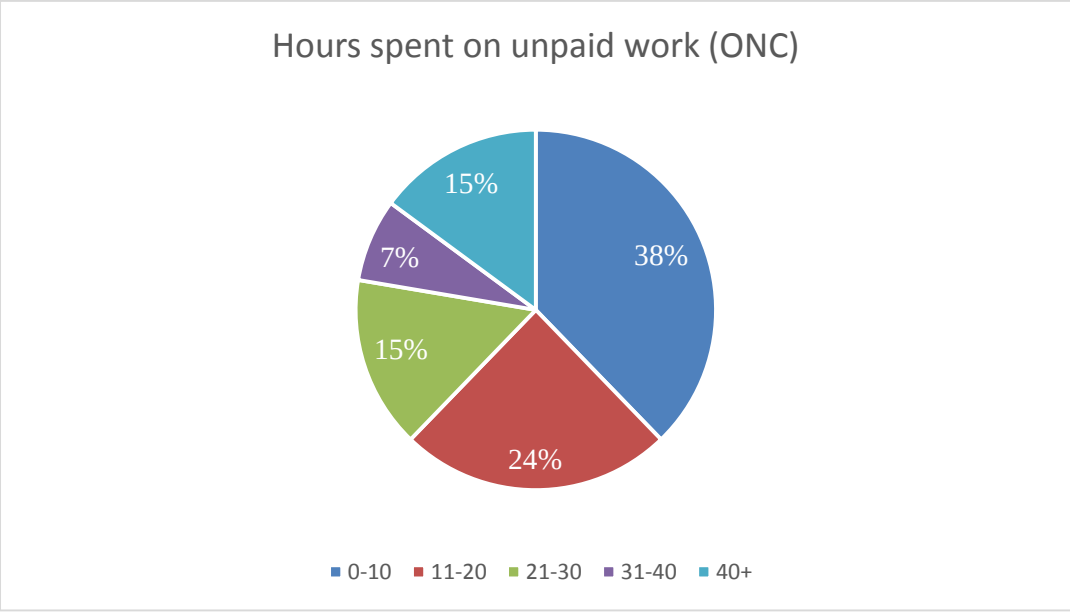
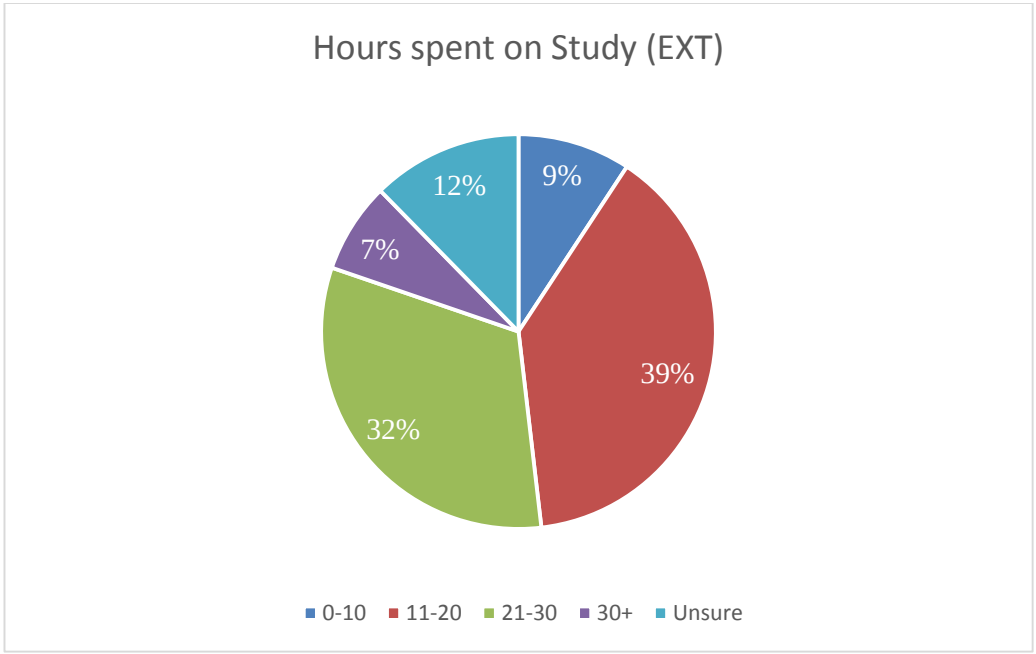


Figure 4.2 percentage of students and number of hours expected to be spend in unpaid work N=722

The charts show the number of hours students expected to spend in unpaid work, related to domestic and carer responsibilities. 42% of external students expected to spend more than twenty hours per week in unpaid work compared to 38% of onsite students. In terms of time constraints many TPP students expect to spend many hours in unpaid work and in some cases this represents an additional burden to the number of hours spent in paid work (employment). Time spent meeting basic economic needs and family obligations represent socioeconomic constraints and reduce the amount of time available for study.

TPP is a full time program with a recommended study load of 22 hours per week. Many students spend considerable time meeting non-study commitments which may be perceived as a negative influence on successful attainment of student goals. The following table shows the number of hours students expect to spend on study per week, based on student expectations during the first week of study.



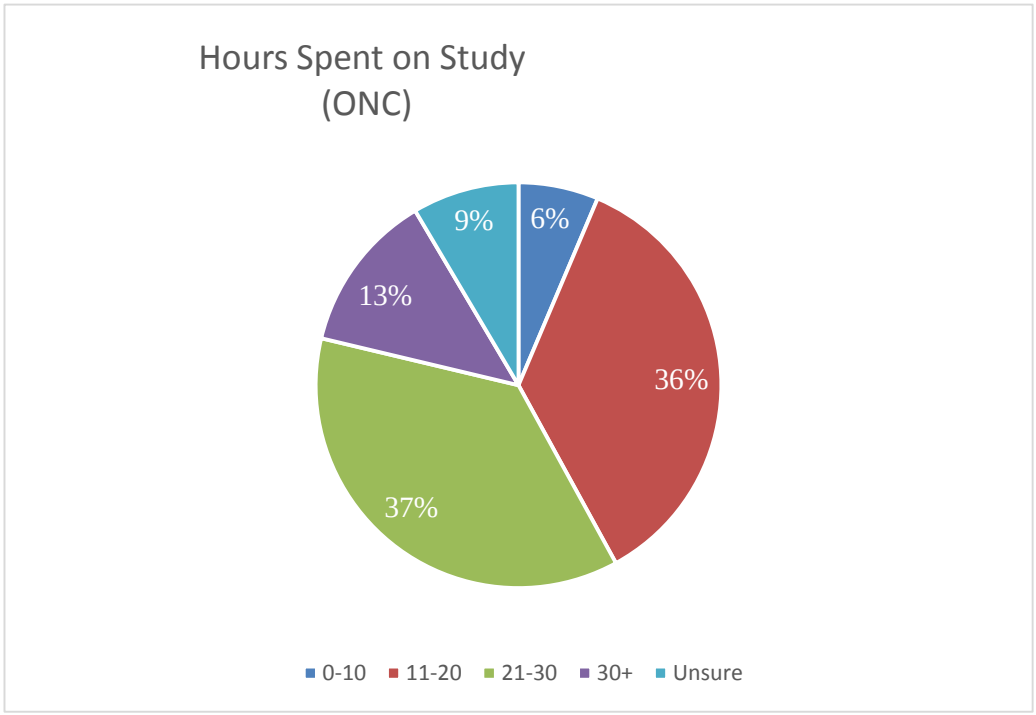


Figure 4.3. Percentage of students and number of hours they expect to spend on study each week N=722

The figure shows that 39% of external students and 50% of onsite students expect to devote more than twenty hours to study and therefore appear confident they will be able to match academic requirements in terms of the number of hours they expect to spend in study. (The number of hours of study recommended by TPP is twenty two)

Thus in terms of socioeconomic constraints, a substantial portion of TPP students expect to spend quite long hours in paid and unpaid work, with external students spending more time on non-study commitments and therefore with less time available for study. Nevertheless, at week one of program progression the majority of students are confident they will be able to balance study and non-study commitments and spend enough time on study to match academic requirements. As the next section will show, however, by week six of program progression, expectations about finding enough time for study change.

4.3. Constraints experienced at week six

This section will describe the range of constraints commonly reported by TPP students based on data from a student assignment submitted in week 6 of program progression. The typology of constraints is based on the quantitative analysis of keywords used by respondents in the study, the description and discussion of categories reflects the role of the researcher in selecting the key words.

The following table shows the main categories of constraints reported by students in week 6, just under half way through the program. Constraints have been categorised with reference to key words used by respondents to describe the nature of the constraint.

Table 4.1. Categories of constraints reported by respondents in week 6 (n=85)

Type of Constraint	Number of constraints identified by each respondent
Paid and Unpaid Work	20
Paid Work Only	11
Unpaid Work Only	14
Academic	12

Procrastination	13
Time-management	5
Health	4
Finance	6

The most commonly reported constraint was ‘not having enough time’ for study because of non-study commitments. Thus 20 students in the sample indicated that time spent in paid and unpaid work was a constraint to study. While paid work refers primarily to employment commitments, unpaid work refers generally to domestic and carer duties such as household chores and caring for children or other family members. It is notable that the number of students reportedly constrained by commitments to both paid and unpaid work was the largest in the sample (20) compared with (14) respondents who cited only unpaid work as a constraint and (11) who cited only paid work. This information about the student experience of time constraints measured in week six contrasts sharply with the expectations expressed at time of course commencement when students were confident they would be able to balance study and non-study time commitments.

Academic constraints (12) generally referred to difficulties in matching TPP requirements. Time-management and procrastination (13) issues referred either to lack of knowledge of how to structure time appropriately or more commonly how to apply study plans and schedules to accommodate different role responsibilities. Generally these constraints have been labelled as academic (study) commitments because they relate to the TPP curriculum. One of the three components of the TPP program is devoted to Study Management, and includes knowledge and skills of how to structure and manage time in relation to study and non-study commitments.

Many students mentioned more than one constraint and sometimes it was difficult to decide which constraint was most salient. In addition, some students reported procrastination as a constraint but related this to motivation while others attributed procrastination to poor study management. The purpose of the table of constraints at this point is to show the range of constraints that students experienced in the early part of the course.

4.4. Constraints – emergent themes

This section presents data generated by analysis of responses to assignment items completed in the final weeks of program progression and responses to interview prompts. Analysis of this material resulted in the emergence of four emergent themes.

- Socio-economic constraints
- Academic constraints
- Interpersonal constraints
- Communicative constraints

4.4.1. Socioeconomic constraints

Socioeconomic constraints refer to social and economic conditions that constitute the situational context of study. In terms of social reproduction theory, socioeconomic constraints are derivative of social and economic position in society and therefore constitute structural constraints with restricted opportunity for individuals to exercise agency.

4.4.1.1 Paid Work

Data from assignment documentation (week 6 and week 13) and interviews confirm the information in figure 4.1 (above) that some TPP students work long hours which leaves little time for study.

> *I start work at 9am and sometimes don't get home until 10 pm .After getting home I really need to get some motivation in doing university as I am quite tired and stressed and the last thing I want to do is study. If I get home late, I still do at least an hour of uni (depending on how late it really is) just so that I am not extremely behind. (sic)*
> (Cheryl)
>
> *I work fifty-five hours per week, both day and night shifts, which takes up the majority of time I have available for study.*
> (Bob)
>
> *Working upwards of sixty hours a week sometimes can make it very hard to find time to study. I work full time and have to be prepared at any time day or night. As a result of my situation I study on the odd occasion I get time off and usually get one day off each week.*
> **(**Martin)

Martin, Cheryl and Bob exceed the 40 hours per week that is generally regarded as a full time work load. TPP is a full time program with no part time option and therefore for some students paid work represents a major structural constraint over which they can exercise little agency. The report by James, Krause and Jennings (2010) confirms that some undergraduate students in Australia need to work relatively long hours to meet basic living needs. This finding is supported by research in the United Kingdom (Moreau & Leathwood 2006) who conclude that some students work to finance the necessities of life, while others work to finance a lifestyle. Working as an economic necessity represents a structural constraint whereas working to finance a 'lifestyle' represents agency because there is a much greater degree of flexibility and choice for the individual. Research literature supports the conclusion that commitment to employment can represent a constraint to persistence. Perrone and Vickers (2003) report that, for university students who worked 20 to 29 hours per week, the odds of dropping out are approximately 160 per cent greater than for students who do not work at all. For those who worked over 30 hours per week, this figure was between 200 and 204 per cent. While the academic community tend to view paid work as interfering with study, the student perspective is that study interferes with work, which is a source of resentment and dissatisfaction (Lingard 2007), and working students want universities to be more flexible in their time requirements.

The negative effects on study of working long hours can be exacerbated when the conditions or hours of work fluctuate or are unpredictable.

> *Work took me away from home and put me in a place where I had no time for anything but work. This upset my rhythm I was achieving with my studies and also had me doubting if I could continue down the road towards my long term goals*.
> (Arthur)

> *I entered the TPP course with the realisation that I had a lot of free time at work while I was in between projects and at the time of enrolment there was no indication that any major work was up-coming…… As soon as the semester started I was inundated with work…..those in management who (previously) recommended that I use my work time to study were suddenly telling me that work must come first and I would have to take the remainder of my study home if I cannot complete it between work duties.*
> (Trevor)

Unanticipated changes to working times and conditions caused Arthur to fall behind his study schedule at a time when he felt he was coping with academic requirements. Trevor's evidence shows that he too considered withdrawing from study because of unanticipated changes at the workplace, despite having an excellent academic record in terms of assignments successfully completed. Previous research has established that working full time or coping with pressure to work additional hours increases the chances of non-completion of online courses (Pierrakeas 2004). Thus, it is not only the number of hours spent at work that constrains study efforts, but also the working conditions and perception of powerlessness (lack of agency) to negotiate times and conditions of employment.

Not all students experienced full time paid work as a constraint. For example, Stewart reportedly *worked full time 9-5 on shift work* but had *no significant family responsibilities*. He found TPP *easy enough* despite only *devoting 10 to 12 hours per week on study* and not having formally studied since leaving high school. He did receive *considerable support* from his partner who *has studied tertiary level before* and *helped with encouragement and practically by proof reading assignments and providing tips on academic writing.*
(Stewart)

Stewart did not experience full time work as a constraint despite the fact he did not study for the recommended 22 hours per week. He considered he had sufficient time for study and was able to achieve his learning goals despite only studying for 12 hours per week. In his opinion this was possible because of the help and support from his partner who has previous experience of tertiary education. Thus the potential negative effects of full time work on the amount of time available for study were compensated in this case by access to social and cultural capital (support).

4.4.1.2 Unpaid Work

> *Work impacts my study schedule as it disrupts my family time for cooking dinner and getting our daughter ready and putting her to bed. This means that my study time starts late. The way in which my life is structured to combine family, study and work means that most of my study is between 8pm and midnight so if I start late I have to finish late or lose hours of study. I am then up either at 5am on a working day or 6am on a study day and the*

> *mornings have no flexibility on when I have to be up.*
> (Erica)

> *My house can be extremely disruptive with my children and when I do find time to study it is often difficult to concentrate. The constraint of time strongly affects my overall productivity both in my study and work and impacts on my family life as well.*
> (Joanne)

A sense of powerlessness and lack of agency are common threads that run through many of the student descriptions of constraints related to non-study commitments. For example, it is notable that Erica uses the passive voice (*the way in which my life is structured*) rather than the active voice (*the way I structure my life*) to explain why she studies late at night.

Prioritisation of other commitments over study appears to be 'natural' (for example shift changes taking priority to study) from the student perspective and there is no discernible challenge to assumptions and beliefs about responsibilities associated with the role of working mother. There is little doubt students who prioritise non-study commitments are aware that studying late at night, or at a time when they are tired, is not the best strategy for successful study and is likely to have negative effects on study outcomes and the quality of the study experience. The reference to *impacts on my family life as well* is important because it draws attention to the interdependence between intrapersonal and interpersonal factors that impact on the study experience. For many TPP online students the home environment is also the study environment and the capacity to structure time and space to facilitate study is heavily constrained by social roles and responsibilities.

4.4.1.3. Conflicting Priorities

> *There are complexities of needs within my family ranging from those of the children to the mental and physical needs of adults, all of which I must deal with. I now find myself overwhelmed, trying to find a balance between home and study knowing my family feels annoyed by my indulgence*.
> (Belinda)

> *I have found that my baby has been my biggest obstacle. I find that I do my best to set aside time to study, which on paper is so very easy, it is still very hard with a one year old to stay focused on the task(s) ahead.*
> (Hilda)

The two quotes above indicate not only a sense of powerlessness in relation to balancing study and non-study commitments but also awareness that current

approaches to study are not likely to be the most effective in terms of attainment of personal learning goals. Hilda's comment (which on paper is so very easy) is a reference to a TPP assignment in which students are required to construct a very detailed plan of study for a two week period. In order to match TPP academic requirements for this assignment students must demonstrate a capacity to construct a plan which balances study and non-study activities. In fact, Hilda scored very highly in this particular assignment and therefore it seems reasonable to conclude that her constraint of not having enough time for study because she is committed to looking after her baby does not reflect lack of academic skills or a knowledge deficit in relation to time management. Belinda's description of her study commitments as *my indulgence* may indicate a lack of family support but may also reflect her view that personal development needs are a luxury that should not be prioritised over the collective needs of the family. Clearly, Belinda believes it her personal responsibility to fulfil the needs of others in the family (*all of which I must deal with*).

Thus adoption of ineffective study habits and prioritisation of non-study commitments do not necessarily reflect knowledge deficits related to time management or how to plan study activities. Time constraints may reflect values and dispositions which are incongruent with best study practice and achievement of learning goals. According to Lehmann (2007) working class students experience *a fundamental discontinuity between the values of their working-class habitus and their middle-class goals and destinations.* Lehmann's categorisation of students as 'working class' may be more appropriate to the social context of UK than Australia, but the idea that values and cultural practices derivative of the family habitus may be incongruent with best study practice offers a partial explanation why some students struggle to implement what they have learned from the TPP curriculum about good study habits and time-management. For students such as Hilda it may be a relatively easy academic task to construct a study plan that prioritises study time but in the situational context of daily life students tend to find it difficult to implement an effective study approach if they perceive study interferes with family responsibilities (Reay, Crozier & Clayton 2010).

4.4.1.4. Cultural Incongruity and Responsibility Conflict

Self-regulation and finding time for study is not only about time management and being well organised, it is also about managing social roles and relationships.

> *The biggest obstacle I have had to overcome is a very demanding family. I am the single mother of three young boys who all have extra activities either before or after school or both. I am employed on a full time basis so there is little time left for me to study. Weekends involve more children's activities, housework and shopping. These constant demands on my time only allow me to study late at night. I also squeeze a few hours in where I can on the weekends. Falling behind with my studies causes me to hand in work at a lower standard than I would like to and know I am capable of achieving.*
> (Trish)

The quote from Marjory not only illustrates constraints on study due to role responsibility but also underlines the negative effect study can have on existing social relationships. The quote from Trish exemplifies the way in which many TPP students feel they need to sacrifice self-development to the needs of family and therefore social roles and responsibilities are prioritised over study

> *I personally found it very difficult to stick within the boundaries of my study schedule due to the fact I highly underestimated my ability to work full time, study part time and maintain healthy relationships with family members and my beloved partner. By underestimating I am meaning the fact if I spent as much time as I had set aside on studying it generally caused tension with a relationship, this notion reversed also caused problems, if I spent more time than allocated with loved ones it would cause troubles with my study which always seemed to cause me to lose excessive hours of sleep. This loss of sleep then caused me to perform lower than normal at work and caused anxiety and frustration within myself.*
> (Marjory**)**

TPP students expressed a sense of frustration at their restricted opportunities to fully explore their potential as tertiary students. Frustration does not stem from dissatisfaction with course provision or the capacity to match academic requirements. According to Marjory and Trish, frustration arises because time and effort expended on the practicalities of matching expectations related to social roles does not allow enough personal time and space for self –development. TPP students experience tertiary study as a disruption to normal routines and relationships. In addition to the constraint of learning about effective time management TPP students face the additional constraint of having to renegotiate personal relationships and social roles.

Previous research has established that academics tend to emphasise academic inexperience and a deficit of skills as the most important constraints to successful persistence, whereas students tend to place more emphasis on practical problems and the social context of study (Taylor & Bedford 2004). Findings from the present study support the latter view, that the importance of social roles and responsibilities should

not be underestimated in terms of the potential impact on successful persistence. Additional support for this claim is provided in Elliot (2002) who found that failure to solve practical problems associated with reconciling study with family responsibilities was the most frequently cited reason for discontinuation of study by females on a first year nursing undergraduate program at University of Western Sydney. The types of constraint described by Trish and reported in Elliot (2002) are very similar to those reported in the research conducted by O'Shea (2014) who points out that the types of constraint experienced by Trish have been reported across generations of non-traditional female undergraduate entrants. O'Shea (2014) further argues that widening participation has resulted in improved access to tertiary programs but successful persistence for mature aged females continues to be constrained by socially sanctioned expectations that genderised role responsibilities will be prioritised over self-development.

> *How can I tell a sick child to leave Dad alone he is too busy? Life doesn't work that way! I don't want it to work that way, why should I be stuck on the computer working when my wife and kids are off shopping or at the pool or ……. Simply put if next week is anything like this week I don't know if this course is going to be completed ……..it is too hard to balance everything, to be everything that everyone wants me to be. I have two choices a) sleep less or b) ask my wife for more help. Neither is appealing.*
> (Harry)

Harry illustrates how students who do find time for study may still experience dissonance in attempting to reconcile role responsibilities and perceived conflict of duties. While Trish (in the quote above) cannot find time to study because she is shopping, doing housework and ferrying children to various activities, Harry resents being stuck at the computer (working on TPP) when the rest of the family are off 'having fun' shopping. His initial comment with reference to a sick child suggests a sense of guilt because he perceives fulfilment of his role as student is interfering with fulfilment of his role as a father. Previous research has shown that, for many women, becoming a tertiary student is a transformative process in terms of cultural practices associated with carer duties and role fulfilment (Stone 2008). Harry's quote suggests that men with family responsibilities may be equally constrained by the challenges brought about by shifts in values and cultural practices although they are manifested differently by males. There is a strong sense of resistance in the quote from Harry, not only in terms of role fulfilment but also a resistance to embrace changes to self-

image and identity that are part of the transition process experienced by many mature age students (O'Shea 2011). Successful persistence in pathway program such as TPP may require significant changes to social relations and cultural practices within the family context, and such changes may be resisted, especially in the early stages of course progression. Failure to successfully manage such changes is a significant constraint to successful persistence with study.

4.4.1.5 Socio-economic constraints summary

Time constraints experienced by students are discussed in this section with reference to structure and agency factors. Constraints commonly reported as time pressure related to non-study commitments, were often experienced in relation to the number of hours available for study. Some students spend so much time and effort in paid and unpaid work that they felt there was little time available for study. Often students discussed lack of time by reference to quality time for study, illustrating how it is not simply a question of the number of hours spent in each activity that impacts on study but also the conditions and type of work.

Many students feel powerlessness to negotiate times and conditions of work, both paid and unpaid. Low self-efficacy or resistance to renegotiate existing social roles and responsibilities can result in failure to self-regulate the study environment. Students are aware of the need for quality study time and the importance of constructing study schedules and time management but often cannot implement plans because good study practices are often perceived to interfere with good 'home' practices especially in relation to carer duties. This constraint may be exacerbated by a perception that self-development through education is a luxury or leisure type activity that should not be prioritised over the needs of others. The relationship between study and non-study commitments is therefore mediated by values, beliefs and dispositions to behaviour derived from the home habitus. Experiences of stress in relation to study may reflect the emotional dissonance caused by attempts to incorporate new role responsibilities associated with being a tertiary student with other role responsibilities associated with paid and unpaid work.

4.4.2. Academic constraints

Open access does not mean all students begin TPP with the same educational history or experience. Educational histories, especially in relation to type of secondary

school attended, reflects social position and therefore academic history prior to enrolment in TPP is also a structural constraint that influences how students engage with tertiary study. According to social reproduction theory, students who attend elite institutions are groomed for tertiary education through primary and secondary socialisation. Students at elite institutions have often attended the same preparatory schools which specialize in enabling students to accumulate the appropriate forms of capital that ensure a seamless transition from secondary to tertiary education at 'top' institutions. Thus preparation for university is literally lifelong for many traditional students entering elite universities.

The combination of experience, acquired skills and cultural practices appropriate to the field of academia was described by Bourdieu (1990) as developing a feel for the (academic) game. Originally Bourdieu used this concept of having a feel for the game to explain the mastery of performance displayed by sports professionals who appear to perform at a high level because of natural talent, but in fact the quality of performance reflects nurture just as much as nature. Mastery in any field takes years of practice and TPP students are not expected to demonstrate mastery in the field of academia. Nevertheless they are required to meet prescribed academic standards within a minimum period of one academic semester. Although TPP students are characterised by social and cultural diversity, they have very low levels of academic capital at time of TPP commencement. The section which follows will analyse how low levels of capital influenced TPP students' persistence.

4.4.2.1. Unrealistic Expectations and Low Self-efficacy

Quantitative data collected in response to assignment questions in week one were analysed to measure the extent to which students felt confident about coping with certain aspects of the TPP course. The following chart illustrates that commencing TPP students have very high levels of confidence in relation to their capacity to match TPP requirements in different areas.

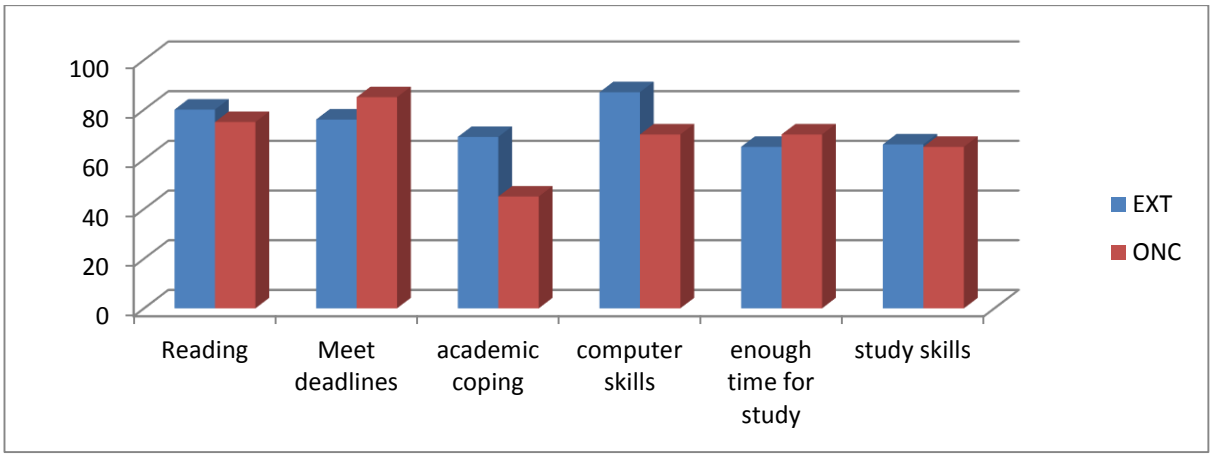


Figure 4.4. Percentage of students who have high levels of confidence at program commencement

Generally TPP students express high levels of confidence about matching the demands of tertiary study. For example, despite spending considerable numbers of hours in paid and unpaid work (see above), around 60% of students are confident or very confident of having enough time for study. Around 80% of students were confident of meeting academic deadlines and, despite lack of experience of tertiary study, most students expressed a high degree of confidence in their capacity to cope with the academic demands. These high levels of confidence were not sustained however.

The very high levels of confidence expressed in the first week were contradicted by the students' experience of constraints during course progression. Reported time constraints and difficulties in meeting academic requirements within the time frame set by the university show that high levels of confidence were replaced with low self-efficacy as the realities of tertiary study challenged initial expectations about coping.

> *Sometimes I have fallen behind on my study schedule because I do not realize or think about how much work will be involved in a particular assignment or that I have also forgotten how to do basic things like sentence and paragraph structure.*
> (Anita)

> *Tertiary Education is also difficult at times and requires much more effort than previous education types especially straightforward schooling.*
> (Jerry)

> *When I first started TTP I was unsure what to expect regarding how much work, how difficult the work would be and overall how much time I would need to put into the course. I soon found myself running out of time to do my assignments causing the quality to fall.*
> (Herbart)

Understanding the nature of academic study and the time and effort required to match normative expectations is part of the cultural capital necessary for successful

persistence with study. An individual's capacity to match academic expectations is predicated on a realistic assessment of what is required and this depends partly on a type of academic experience TPP students do not have. Previous research suggests it is not only TPP students who misjudge the nature of tertiary study because of lack of experience. This constraint has also been reported by Pierrakeas et al (2004) in relation to persistence in other distance education programs. Schunk and Pajares (2004) estimate that 20% of students commence studies with illusions of competence while another 20% have illusions of incompetence. The importance of adopting realistic expectations about tertiary study has led some researchers to call for improvements in advising and orientation despite findings that students on pathway program have a tendency not to read relevant literature prior to commencement of the course (Clay et al 2009).

4.4.2.2. Unfamiliar Literacies

Levels of confidence expressed during the first week of semester soon evaporate with the reality of experience and realisation that academic literacies are forms of academic capital that are not easily accumulated..

> *Before beginning the course, I had absolutely no idea about academic writing, or writing factual based arguments, and I am struggling to write academic sentences. There are so many things to remember regarding academic writing. I am frustrated as I feel silly and stupid for not been able communication effectively through my writing*.
> (Nat)

> *Academic writing was a new experience for me. I had no idea there even was such a thing so it took me a while to understand the requirements. My first academic writing task received a scathing result and I was asked to resubmit. When I received my first mark I was bitterly disappointed and questioned my decision to embark on further higher education.*
> (Christopher)

TPP students often express disappointment because they receive lower than expected grades. The quotes from Christopher and Nat show unfamiliarity with basic university literacies like academic writing. Because Christopher was unfamiliar with the role of feedback he was also unprepared for the feedback he received. He discovered that feedback from assignments can be a painful and emotional reality check. Feedback intended to support students with future assignments can be less than effective if students do not interpret it as support and therefore feedback intended to promote persistence can actually lead in the opposite direction when levels of academic capital are low. Low levels of self-efficacy can be further reduced if students attribute poorer than expected grades to lack of ability or aptitude rather than lack of experience or a learning opportunity.

4.4.2.3. Unfamiliar Online Delivery Modes

The online delivery exacerbates Colin's insecurity about how well he was progressing, revealing his needs for constant reinforcement that he felt wasn't assuaged by the online assistance provided.

> *Studying off campus is quite convenient as it enables me to continue to work full time. But without having the at hand help of a lecturer, if there is something I am not quite sure about, although I do have the availability to contact someone from the university to assist with my question, sometimes I am left feeling unsure as to whether or not I am learning something correctly and unsure if I am progressing through my study accurately*.
> (Colin)

Kate's testimony reinforces research with undergraduate students demonstrating that lack of familiarity with learning management systems can constrain student efforts to successfully persist with study *(see Lawrence 2013).*

> *Having to use the computer as the main tool for completing and submitting assignments, was a challenge for me. Without the help from the on campus services provided by the University; such as the computer class in orientation week, I would not have been able to complete this course*.
> (Kate)

Other students, like Harry and Blair, felt that they needed to be provided with information technology skills before they commenced their studies.

> *Computer skills I have found important and even though I have the basics, I believe as an older student we need to be more equipped to keep up to the workload that is presented to us*.
> (Harry)

> *My recommendation to future students is to ensure they possess basic Information technology and word processing skills prior to commencement of studies as the University of Southern Queensland extensively utilises these forms of communication in the flexible learning mode*.
> (Blair)

TPP is on online course with limited opportunity to attend on campus support classes. Access to this type of support is dependent on living within commuting distance to one of the USQ campuses. Distance from university and lack of public transport have been identified as barriers to participation in tertiary studies (Wilks, 2012). Kate's quote indicates how important an on-campus presence can be in developing the technological skills required to fully benefit from online study. Although technical support is offered by USQ, the TPP curriculum does not include development of IT skills that might be considered fundamental to development of

university literacies required for online participation. Lack of familiarity with online learning systems can negatively affect the transition process (Lawrence 2013, p201). Colin, like most other TPP students, is new to online learning, but his comment about having a lecturer *at hand* to clarify misconceptions also reflects lack of familiarity with teaching and learning practices at tertiary level. Colin's expectations about the nature of support could be regarded as unrealistic even for an on-campus student. Nevertheless, the evidence demonstrates that some TPP students may not find it easy to engage with online learning resources and therefore experience mode of delivery as an additional constraint (Angelino 2009).

4.4.2.4. Low Levels of Linguistic Capital

> *I have had times when I found reading difficult and could not clearly understand the task which they wanted me to do in my assignment. I find reading difficult when I see words I have never seen or heard before and even when I look the definition on the internet or on the dictionary they use a word which I do not know to describe the meaning of the word I was originally looking for. So then I have to find the meaning of two words, and this process can sometime be very time consuming. Because of this constraint I had to resubmit an assignment all because I did not understand the task clearly.*
> (Jay)

> *It is difficult for me to get enough quality time for my study due to many need I have against on my time of studying. I am the father of three children which I have given the rest of my study time to help my wife provide for their need. To make it more difficulty I am working night shift full time, where by I can not have enough quality time to sleep during the day with so many nosy outside in the street and even in the house for the children*. sic
> (Mo)

Jay and Mo illustrate how difficulties related to language and literacy can be a pervasive constraint to successfully persisting with study. Difficulties related to levels of language and literacy proficiencies result in Jay and Mo taking longer to process information and make it difficult for them to match academic requirements. The fact they perceive it takes longer to comprehend program material compounds time constraints related to socioeconomic conditions of study *(working night shift and failed attempts to get enough sleep).* Mo belongs to a local community group of refugee students whom he describes as being *tremendously supportive* of his efforts *to pass TPP*. However none of the other members of the group have experience of tertiary education and indeed have had little exposure to the education system in

Australia. Thus the group can provide little access to forms of cultural and linguistic capital that could facilitate Mo's study efforts. What is intended as moral support and encouragement can be perceived as pressure to succeed by many students who are first in their ethnic community to attend university and who face many additional constraints in comparison to traditional students. In terms of relative disadvantage, non-native English speakers from ethnic minority communities face additional constraints to successful persistence with study on pathway programs. Low levels of socioeconomic capital compound constraints related to low levels of linguistic and literacy capitals that makes the transition to undergraduate study particularly challenging for this student cohort.

4.4.2.5. False beliefs, misattributions and low self-efficacy

High levels of confidence expressed at the beginning of the program are often replaced with low self-efficacy after students become more aware of the realities of matching academic requirements.

> *I believe that I will not do very well at any of the assignments nor do I fully comprehend them. So I continuously put it off and do things that more interest me, until mere days or hours before the due date. This, in turn, creates stress leading myself to an even stronger belief that I will not be able to do it.*
> (Sam)

Sam's belief she will not do very well reflects unrealistic expectations about the nature of feedback. Anecdotally, many TPP students measure progress by comparison with peers or by reference to expectations at program commencement at a time when they have little insight into the reality of tertiary study. Sam's testimony demonstrates how disappointment with grades can be perceived as lack of 'ability' and this misattribution can lead to procrastination or other unhelpful study habits.

> *The main constraint I have encountered while studying is my own lack of commitment to putting 100% into my assignments, I often find myself starting my assignments late, not being thorough, and easily becoming distracted part-way through and forgetting to finish my work.*
> (Craig)

Craig's evidence is typical of many comments made about students' lack of commitment to their studies. Lack of commitment and low motivation were commonly cited as reasons for procrastination, which was one of the most frequently cited constraints reported by students in week six of program (see table 4.1) . While

Craig attributes his procrastination to his personal approach it maybe more a consequence of being unclear about his purpose and goals and thus his motivation to study. Craig, like the overwhelming majority of TPP students, has no formal academic experience beyond year 10 or 12 of high school, and it is possible that he doesn't know how to go about the business of learning at tertiary level. Mary, meanwhile attributes her lack of efficacy to her age and lack of educational experience.

> *A constraint that I have been dealing with in my higher education studies, is a lack of knowledge. The main reason for this, is that as a mature-age student, it has been 34 years since I was in high school, and 5 years since I have done any form of study. I am finding that I am slower to absorb information and to understand a lot of the assignment tasks and to formulate my work in these courses.*
> (Mary)

Students' evidence confirms that confidence and sense of self-efficacy also depreciate if students fail to recognise the nature of tertiary learning as a process because they misattribute constraints related to learning to psychological failings or lack of intellectual prowess. Procrastination (Craig) was widely reported as a constraint in this study and was often mentioned in association with motivation or commitment rather than in the context of approaches to study or study management. Lack of knowledge and speed of processing (Mary) are further examples of constraints resulting from misattributions about aetiology of academic difficulties. Mary's belief about learning as a process of knowledge accumulation, and attribution that her perceived lack of progress is reflective of a cognitive deficit in terms of information processing speeds that are comparatively slower than younger peers, inhibits reflection on the learning process. The belief that tertiary education is a test of intellectual capabilities that are innate has been reported elsewhere in the undergraduate research literature (Stone 2008). The capacity to think reflectively on learning has been identified as a key graduate attribute and an important component of lifelong learning (Devlin 2002). Learning how to improve future study practices through reflection on learning as a qualitative process is constrained if individuals attribute perceived difficulties in terms of psychological attributes such as lack of motivation or commitment.

It has been argued elsewhere (Abbott-Chapman 2004) that length of time away from formal study is an important influence on persistence with study. Mary provides

support for this claim, while her testimony also supports research evidence that mature-aged students face additional constraints caused by feelings of being 'different' or 'out of place' at university if peers are perceived as younger or 'smarter' (O'Donnell & Tobbell 2007). More generally, the quotes illustrate the type of misunderstanding that can arise when students assume tertiary education is like previously experienced learner environments (Bowl 2001; Speigler 2013; Thomas & Quinn 2006).

> *Upon starting TPP I only made time for the assignments. I have found meeting deadlines are tough and I have submitted assignments either late or on the due date due to this issue. I have also learnt that I have to study all the suggested materials, readings and study modules in order to do well in the TPP course. I did not take it seriously, because it is not a Bachelor or Degree program and I expected TPP to be easy. I have also encountered problems with prioritizing study over home duties and children sometimes. I find myself unable to relax and commit to study unless I have completed all my house work and spent adequate time with my children, therefore it affects the way in which I study*.
> (Maria)

The quote from Maria is taken from a late assignment that required students to reflect on what they had learned about the nature of tertiary study and illustrates how successful persistence with study is influenced by a capacity to embrace changes to study practices based on revised expectations and beliefs about the nature of tertiary study. Maria reflects on mistakes made in the early stages of TPP, which resulted in adoption of unhelpful study strategies that compounded difficulties in balancing study with other responsibilities. Misunderstanding about the nature of tertiary study makes it more difficult to match university expectations. Difficulties in matching university norms has been shown to be an important contributor to low self-efficacy and non-completion of undergraduate study (Willcoxson, Cotter & Joy 2011). Evidence from this study suggest unrealistic expectations, false beliefs and misunderstanding about the nature of tertiary study are constraining factors to successful persistence in pathway programs such as TPP.

4.4.2.6. Academic constraints summary

This section has discussed constraints that inhibit students' transition to tertiary studies and negatively influence students' capacity to cope with the demands of tertiary level study. Bourdieu's (1990) notion of developing a 'feel for the academic game' can be applied in the context of TPP students who are constrained by their

educational histories, manifested by low levels of the types of academic and cultural capital that facilitate tertiary study. Findings show that many TPP students struggle to become familiar with sociocultural and discursive practices that dominate university studies and this inhibits their capacity to match academic requirements within the time frame for completion, set by the university.

Lack of cultural capital is manifest by unrealistic expectations at time of commencing TPP. Newly commencing TPP students tend to have unrealistic expectations about the nature of tertiary study and are overly optimistic about their capacity to balance study responsibilities with other role responsibilities, especially in relation to paid and unpaid work. Realignment of expectations as a result of experience of studying TPP can be a considerable impediment to progress if commonly experienced difficulties are interpreted by students as evidence of deficit in terms of cognitive functioning or psychological attributes such as commitment and motivation. Successful persistence with study requires students to manage or overcome perceived barriers, especially time constraints. Unfamiliarity with online delivery modes, low levels of linguistic capital and difficulties related to academic reading and writing practices result in students taking more time than they expect to comply with academic standards and therefore they experience time constraints.

4.4.3. Interpersonal constraints

Successfully balancing study commitments with other life commitments requires not only good study management skills but also good interpersonal skills. Embarking on tertiary studies can result in a disruption to normal family routines (Stone 2008). Successful persistence with study is influenced by students' capacity to manage this disruption. Bill cites one of the typical constraints experienced be TPP students.

> *When another family member is home I find that it interrupts my studying process because the television is always on and I have found it to be really difficult to concentrate. The reason why I am around the TV is mainly because the computer is in a position of the house where all can use it. I find myself waking up at all different times just to have that time alone with the computer without the television on*
> (Bill)

Interpersonal constraints also emerged because students' expectations of family support remained unfulfilled, perhaps because they were not direct in expressing

their needs for support and therefore blamed themselves and their capacities for tertiary study.

> *One of the biggest difficulties that I have encountered on my TPP study journey so far is self-doubt. I thought my immediate family (husband, parents, and sibling) would be a lot more supportive of my choice to go back and continue studying. It has affected my progress in the sense that a lot of the times I ask myself "why bother?" and I am left feeling stupid and dumb therefore I tend to leave assignments until the last minute and cram in study at all hours*
> (Val)

Bill and Val both illustrate the importance of social context in understanding the support needs of TPP students. TPP students are heavily reliant on moral and practical support from family and significant others but this is dependent on an ability to manage interpersonal relations in a way that facilitates study. Bill actually described his main constraint as one of 'finance' because he could not afford to buy his own computer. Lack of funds to buy a computer exacerbates the constraint of having to study online because Bill's place of residence is a long way from a USQ campus. On the other hand, Bill's constraint can also be interpreted in terms of interpersonal capital. It may be that others in the household are unaware of Bill's study needs in relation to the computer and it is possible Bill needs to be more assertive in educating others about his study needs. Similarly Val is clearly disappointed that her expectations about family support have not been realised, but her family members may be unsure about the best way to provide encouragement and support. In terms of interpersonal capital, the constraints as verbalised by Bill and Val, were perceived as a lack of support. Lack of support may not indicate unwillingness on the part of significant others to be supportive, but lack of experience of knowing how best to support the study efforts of a tertiary student. Bill and Val face the additional constraint of having to communicate their study support needs to significant others. The capacity to communicate study needs to others unfamiliar with tertiary study practices may be just as important, or even crucial, to successful persistence as learning how to write 'academic English'.

> *I feel as if I have been annoying everyone when I am constantly talking about what I am doing in my assignments. I have started to wonder if anyone is actually listening to anything I say or if it's like they ignore me when I get onto the subject of my studies. I finally bucked up the courage today to ask my closest friend how he felt about me talking so much about my TPP course, thankfully being a nice friend, he told me how he felt about the situation. I*

> *can't believe I `worry about such trivial things, but I will hold off from talking so much about it and show him and all my friends and family that I am much more than just this course.*
> (Drew)

Drew's evidence demonstrates how important the capacity of 'asking for help' is, confirming Lawrence's (2005) argument that this capacity is often difficult for students.

> *My short term management had a lot of negative experiences which were the external pressures placed on me by my daughter. Further to this family commitments and a wife who did not understand my needs to study made it difficult to study to a schedule.*
> (Greg)

Drew and Greg underline the point that support from significant others is not automatically guaranteed and the decision to undertake tertiary study can significantly change social relationships. The need for time and space to study may be intuitively obvious to those with personal experience of tertiary study, but as noted earlier, TPP students are characterised by a lack of this type of experience. The quote from Greg, and others, confirm that the decision to embark on tertiary study can result in changes and challenges to existing social relations within the microsystem. Tertiary study can disrupt existing social relations and other people may not necessarily embrace or welcome changes if they feel excluded or threatened by disruption to the status quo. Thus TPP students may face the added constraint of having to be agents of change within the family and other social groups.

> *I never thought I would make it this far considering how much self-doubt consumed me when first beginning this program. Since then I have noticed it is not the only thing holding me back ….. my lack of support from the one person I thought would have my back through anything I choose to do.*
> (Sam)

Sam illustrates a tendency to 'blame' others, an indication of limited interpersonal capital, rather than putting in place assertive communication skills that could ensure the support he needs, or at least reduce his feelings of frustration about the lack of support after receiving an explanation of why the support is not forthcoming.

> *I have a good study schedule but it is heavily reliant on aspects of daily life which I cannot control, such as children going to sleep on time or things during the day going to plan. When things don't go to plan I find myself getting very frustrated and my concentration wanders making it hard to get*

> *back into the task at hand and ultimately I begin to fall behind or the quality of my work suffers*.
> (Brittany)
>
> *I have been unable to find any study groups to help me study, since I have no family that wants to help me with my study or help look after my kids so that I can try and study……I have been turning towards the social forum for support and guidance*
> (Louise)

The quotes from Brittany and Louise illustrate the extent to which management of study is interlinked with management of life commitments and personal relations. Students are constrained when expected sources of help do not materialise and the need to seek alternative sources of support, such as the social forum, also require management of personal relations and are dependent on interpersonal skills and capital.

Apart from lacking the interpersonal capital of seeking support, some students also face the constraint of having to challenge existing power relations and dominant views of social and family responsibilities in order to receive support from family. Prioritisation of responsibilities and allocation of time for activities, including study, are embedded in the social and cultural expectations of the family habitus. Thus female students may be particularly constrained by multiple responsibilities and face the additional burden of challenging existing power relations in order to renegotiate social roles and relationships (O'Shea 207; Stone & O'Shea 2012, 2013). Decisions about seeking or giving support are embedded and co-constructed within the family or what Fuller et al (2008) refer to as 'networks of intimacy'. In terms of accumulating academic capital, educating others about study needs and showing how they can provide practical help are predicated on interpersonal skills that are not be part of the curriculum.

Difficulties communicating support needs may be further exacerbated if students are first in family to attend university (Thomas & Quinn 2007; O'Shea 2007). For many students, undertaking TPP is a family affair, and the family is the often the first resource students access for support. While the majority of family members appear to offer moral support and encouragement to TPP students, family members may have no experience of tertiary study and therefore lack the cultural capital to help with academic support needs. The capacity to seek out alternative sources of support is

therefore part of accumulating interpersonal capital necessary for successful persistence at tertiary level.

4.4.3.1. Social Constraints

Having an extensive network of friends does not necessarily constitute social capital if it does not provide access to forms of cultural capital that facilitate study.

> *My problem is obligations some of my friends believe I owe to them. I am finding this constraint to be quite difficult to deal with because of a lack of understanding by third parties as to where my time is being spent. Also through a personal perspective I miss having the time to socialise and find it difficult to stand firm on my decision to study at the planned time.*
> (Martin)

> *I highly underestimated my ability to work full time, study part time and maintain healthy relationships with family members and my beloved partner. By underestimating I am meaning the fact if I spent as much time as I had set aside on studying it generally caused tension with a relationship, this notion reversed also caused problems, if I spent more time than allocated with loved ones it would cause troubles with my study which always seemed to cause me to lose excessive hours of sleep. This loss of sleep then caused me to perform lower than normal at work and caused anxiety and frustration within myself*
> (Marjory)

Marjory and Martin illustrate how TPP students underestimate the extent to which tertiary study may disrupt and transform social relations. Tertiary study is a new experience for the TPP participant with considerable implications for relationships with significant others. Changes to relationships brought about by the decision to embark on tertiary study require active management if potential sources of support are not to become a source of constraint. It has been argued above that some TPP students face the additional constraints of having to assertively educate others about their study needs. Thus communication skills are an important part of study management and are crucial to obtaining help and support, but there is little evidence of Marjory or Martin successfully communicating their study needs to significant others. Thus, in terms of cultural capital, some TPP students are constrained by a social context where there is limited familiarity with the demands of tertiary study. As highlighted in the previous section, this constraint is further exacerbated by the need to communicate support needs, predicated on a sense of empowerment to assertively educate others in the microsystem about study needs and how others can help fulfil them.

Non-study commitments do not always mean responsibilities related to paid and unpaid work and for some students, social commitments can be just as binding and may be experienced as a constraint to successful study. The nature of the interaction between structural and agency factors varies according to individual circumstances. Students without significant commitments in relation to paid and unpaid work face the same constraint of accessing and accumulating forms of cultural capital that facilitate successful persistence with study. Helen, who has relatively recent experience of high school and TAFE, reported having no significant time commitments related to paid or unpaid work but did describe herself as *having a hectic social life* which acted as a constraint to her attempts to succeed in transitioning to undergraduate level study. She did attempt to discuss academic difficulties with friends and family whom she describes as *very supportive* in terms of encouragement to persist when she had thoughts of withdrawing from study. Her *dad tried to help with maths but he had only done elementary maths himself so he couldn't really help.* She reportedly found *'English' very difficult* yet expressed surprise at her low grades. She didn't understand the feedback in assignments because *she had difficulty in how to write academic style and the whole outlook of how university wants you to do things in a different way that school would make you do it.* Helen could not benefit from attendance at campus support classes because fellow students *asked too many questions she did not find useful.* She made friends with some fellow students but *they were struggling as much as I was and they all thought they were going to fail.*

Her testimony describes her experiences of constraints to success that ultimately Helen was unable to overcome. Although she had many friends and a network of social connections, she lacked the type of social capital that could facilitate study at tertiary level. Helen apparently has adequate social and communication skills to establish a network of friends but she struggled to become familiar with academic discourse and accumulate forms of cultural capital that would have enabled her to take advantage of support in the form of classes or assignment feedback. There is evidence here of considerable engagement with TPP and fellow students. Helen did not lack support in the sense of people who could provide encouragement. Nor was she reluctant to ask for help. Nevertheless Helen lacked academic capital because her connections did not possess the cultural capital to facilitate tertiary study. The

national study of the first year experience (James, Krause & Jenkins 2010) found that some first year undergraduates experience difficulties comprehending academic material. Helen's evidence suggests that these difficulties are experienced on pathway programs such as TPP and stem from unfamiliarity with the multitude of discursive and literacy practices that constitute reading and writing at university (Lawrence 2005). Having a network of friends may offer moral support but will not facilitate accumulation of academic capital if members of that network are not themselves familiar with academic cultural practices. Helen's testimony shows how the different forms, or levels, of capitals can interact to prevent students overcoming some of the constraints they experience.

Field (2008, p3) explains the meaning of social capital by reference to the old adage "it's not what you know that counts but who you know". In the case of Helen, the adage may require some adjustment to 'It's not what or who you know that counts, but what they know and are willing to share.' Bourdieu (1986) depicted social capital as a resource available to some groups and used by them to exclude others. Friendships and social contacts at university do not necessarily constitute social capital if they do not constitute a resource that can facilitate study.

4.4.4. Communicative restraints

As the data in previous sections suggest constraints related to academic language and literacy practices (related to academic capital) are compounded by communication constraints. Colin (see section 4.4.2.3.) who previously expressed reservations about studying online, was concerned about the nature of online support in the absence of face-to-face contact which he believed would have made his accessing help and support easier for him.

> *This….*(communicating with academic staff) *proved to be very difficult for me and not knowing if every time I emailed a lecture they understood what I was saying. I was very cautious after that incident about what I was going to ask, if it made sense or even if it was relevant. After I tried not to ask my lectures so much for help instead I reached out to my family members and also others in my lectures. I'm sure I'm not the only one who has had lectures misinterpret an email however sometimes the reply you receive back can be just as confusing.*
> (Colin)

The capacity to communicate effectively via email and other forms of electronic media is an important component of communicative competence. The concept of

communicative competence was originally developed by the sociolinguist Hymes (2003) to describe forms of knowledge necessary to use language appropriately in a particular social context. Communicative competence requires knowledge of what to say, to whom, in what circumstances and how to say it appropriately within the norms of a particular speech community. Academia may be considered a particular social context with its own speech community and established norms of appropriateness. As Lawrence (2005) has pointed out, development of communicative competence in an academic context requires mastery of multiple forms of discursive and literary practices. Familiarisation with these different discourses and literacy practices is a challenging process for the teaching and learning community because as Cazden (2011) argues, communicative competence is acquired through interaction and familiarity with a particular speech community The overwhelming majority of TPP students, however, have very little history of interaction with academia or experience of academic discursive and literacy practices.

This is particularly the case with online learning which places heavy demands on students' ability to articulate their support needs succinctly and in a formal register that in itself may be the source of difficulty. Approachability of 'teacher' and support offered in the form of feedback in assignments have been established as important factors in enabling persistence (Willcoxson, Cotter & Joy 2011). Communication intended to be supportive may not succeed if students are not familiar with academic language and literacies, or if communication from the university to students does not attempt to adopt more of a dialogical and 'plain English' approach to communicating with students. Difficulties communicating in an academic context inhibits students from seeking help or in alerting support services to the need for help and some students fall behind with the assignment schedule because they fail to communicate their support needs to support staff.

> *family issues, change of job with more hours, and medical problems…… fell behind and couldn't catch up…….felt less motivated……couldn't get assignments in on time so finished up not submitting them.*
> (Rosemary)

The series of quotes from Rosemary provides a summary of the type of experience reported by many TPP students who fail to seek help or communicate difficulties in

coping with study. Rosemary's evidence illustrates the interaction between different constraining factors has a negative cumulative effect on the capacity to cope with tertiary study. Changes to the situational context of study exacerbate time constraints especially in relation to submission of assignments. Rosemary did not seek help or support from academic staff. For example, she did not apply for an extension to the study period because she *didn't think of it at the time*, despite the fact she retrospectively acknowledged it would have been a *preferred option* to withdrawal and re-enrolment at a later date. The option to extend the period of study is an example of a supporting resource accessible through USQ but, to be able to take advantage of it, students must have the capacity to communicate their support needs and comply with the details of administrative processes.

Brenda, on the other hand, did achieve an extension to the period of study into the following semester but describes the process as *disheartening because of a bureaucratic muck-up*. It appears Brenda misunderstood the formal procedure for applying for an extension and her initial application *was not formally processed*. Subsequently she claims *the paper work got lost and she was sometimes passed around from person to person.* She *was given promises to clear up the problem but these did not materialize* and she was later informed *she would be given a fail did not complete grade.* At this point she communicated her difficulties to another student who told her to be persistent and contact a student representative. The student representative was *really helpful and efficient* and Brenda eventually succeeded in *gaining an official extension*. She described the experience of overcoming the administrative constraints *as more problematical than overcoming the academic ones* and *felt disappointed with some of the conversations where she was lectured about what she should have done to comply with USQ administrative procedures* (Brenda)

The fact some students report reluctance and lack a practical understanding of how to access this type of support is an indication of the constraint faced by new students when negotiating the different universes of discourse found in academia. In addition to the demands of mastering academic discourse, new students face the intimidating effect of institutional and bureaucratized language used to communicate university policy and practices (O'Shea 2007). From an institutional perspective, there is need for a shift in institutional habitus (Thomas 2002) through adoption of more

transparent and less bureaucratic language in relation to information intended for students. Non-traditional students are disadvantaged through lack of preparation for university because they lack the cultural capital in relation to university terminology (Fuller, Heath & Johnston 2011). They tend not to know how to access or exploit supporting resources or how to negotiate institutional rules in a way that avoids a record of 'fail' on their academic transcript (Bryan & Simmons 2009). Bridging socio-cultural incongruity (Devlin, 2011) requires bridging the language divide between students and universities and this requires both sides to develop communicative competence.

4.4.4.1. Communication constraints summary

The findings show students are constrained by low levels of communication capital. Unfamiliarity with university modes of communication and discursive practices constrain students' capacity to communicate support needs to university staff who are in a position to help. Misunderstandings and miscommunication can arise because students struggle to become familiar with academic language and literacy practices. Failure to communicate support needs can result in students falling behind the assignment schedule or prevent them from catching up. Failure to seek an extension to the period of study represents a significant constraint to persistence because this is an important university support mechanism available for students who struggle to progress in accordance with the 'normal' timeframe stipulated by the university. Being granted an extension to the period of study can reduce stress and time pressure by effectively allowing a student to study over a longer period of time, yet the findings show that students are reluctant to utilize this support mechanism. Difficulties related to unfamiliarity with university practices and terminology contribute to this reluctance to engage with official support mechanisms.

4.5. Chapter summary

Constraints experienced and reported in relation to successful persistence with study in TPP reflect the interplay between structure and agency factors. Students commonly reported not having enough time for study because of non-study commitments to paid and unpaid work. The evidence presented in this study clearly shows that many TPP students have substantial non-study commitments and the situational context of study represents structural impediments to successful persistence with study. The strict timeframe imposed by USQ and in particular the

lack of opportunity for part-time completion of TPP is part of the structural impediments to successful persistence which particularly affects mature aged learners with little economic capital to invest in education.

Nevertheless, the way in which time is structured and utilised by students also reflects sociocultural factors related to family habitus. Non-study commitments tend to be prioritised over study commitments. In fact, study is sometimes viewed as a disruption to family life, with responsibilities for the needs of others prioritised over the individual needs of the learner. Students study at times and in spaces only when other social roles have been fulfilled. The results of this study confirm the conclusions drawn from other research literature that suggest some students will consider withdrawal from study if they perceive it interferes with fulfilment of other social roles. This causes frustration and dissatisfaction with the study experience because of the perception by students that they are not maximising their academic potential.

Acceptance of social roles and responsibilities is largely unquestioned and there is a sense of powerlessness to regulate the study environment to free up quality time for study. This is adequately explained within social reproduction theory in terms of habitus being the internalisation of social structure, making social roles and responsibilities appear natural and practices taken for granted. Habitus explains why social agents behave in ways that reflect and reproduce their social situation rather than adopt behaviours that challenge the status quo. ‘Old habits die hard’ may be a cliché but there is some truth in relation to the influence of habitus on study approaches during the transition phase. This explanation can be contrasted with a deficit model in which students fail to structure time and space because they lack time and study management skills. The evidence from this study suggests that poor study habits related to family responsibilities reflect values, dispositions and beliefs systems derived from primary and secondary socialisation rather than failure to acquire the time and study management skills that form part of the TPP curriculum. Constraints to successful persistence are as much sociocultural as academic.

The academic constraints experienced by TPP students tend to reflect a mismatch between the forms of cultural capital appropriate to the home context and those appropriate to the university context. Many constraints reflect lack of experience of

matching university norms and expectations. This is unsurprising since most TPP students have little formal educational experience beyond year 10 or 12 of secondary education. Indeed, pathway programs such as TPP exist to provide the type of experience deemed necessary for undergraduate entry. Nevertheless, progress in TPP can be constrained by poor study habits that reflect unrealistic expectations and misconceptions about the nature of tertiary study. Commencing TPP students have little cultural capital in the form of practical knowledge of how to go about the business of tertiary study. Commencing TPP students tend to be overconfident in their capacity to cope with the demands of tertiary study, especially in relation to estimation of time and effort required to match university expectations. Overconfidence based on unrealistic expectations can dissipate quickly resulting in low self-efficacy and dissatisfaction if progress recorded by assignment feedback does not reflect anticipated levels of achievement. This study shows that it is TPP students' failure to match their own unrealistic expectations of themselves that impede persistence with study rather than failure to match academic requirements of the university.

Student dissatisfaction with their study experience and performance can be exacerbated if lower than expected achievements are interpreted as personal deficiencies rather than learning opportunities. Students who misunderstand the nature of tertiary study or attribute unsatisfactory progress to lack of motivation, commitment or aptitude make successful persistence less likely because performance is interpreted as (lack of) aptitude or application rather than difficulties associated with access to forms of social and cultural capital that can facilitate successful study. According to social reproduction theory, student beliefs about the nature of tertiary study derived from the home habitus are a form of internalized social conditioning that constrains reflective thinking about study processes and the nature of learning at university. This study provides evidence that supports the view that some students are constrained by a belief system that progress depends on biologically inherited attributes rather than culturally inherited forms of capital and this tends to encourage a self-fulfilling prophecy that failure is inevitable. It could be argued that one of the aims of TPP study is to transform the beliefs and misconceptions associated with tertiary study and readjust students expectation to better reflect the reality of tertiary study. As will be shown in the next chapter, students who successfully persist with

study do tend to demonstrate such transformations in their study practices but for some students these transformations in thinking do not occur within the time frame set for completion of TPP and therefore some students successfully persist with study only by repeating the TPP program.

Previous research derived from the Tinto model has largely focussed on interactions between faculty and amongst students on campus. Findings from this study underline the importance of the family and significant others as important influences that shape the TPP student experience. Management of social relations is just as important to successful persistence in TPP as academic progress, especially for the majority of online TPP students for whom the family home is also the study environment. Indeed the evidence from this study suggests academic progress is predicated on successful management of social relations, especially in relation to obtaining support within the study environment. The role of support is widely regarded in the research literature as crucial to successful persistence. TPP students often seek the support of family members and there is a minimum expectation that TPP students will receive at least moral support and encouragement from significant others. This expectation is not always realised, however, and an added constraint for many TPP students is the need to assertively educate significant others about the study needs of a tertiary student and how they can be supportive. Many family members have no personal experience of tertiary education and therefore lack the cultural capital to know how to be supportive. Some TPP students have no alternative but to find other sources of support. Although this is experienced as a constraint by some students, it may actually enable persistence in the longer term because this study shows that overreliance on one resource for support constitutes an additional constraint to successful persistence.

In order to obtain practical help with domestic and carer duties that can free up valuable time for study, TPP students face the additional constraint of having to renegotiate social roles and responsibilities. Obtaining help and support for study depends crucially on communication skills. Communicating study needs to significant others requires a particular form of communicative competence, how to be assertively persuasive in a social context that reflects unequal power relations. A different form of communicative competence is required in dealing with academia. Students need to develop communicative competence using discursive and literacy

practices that are very different from those found in the family habitus and that very effectively exclude and disempower those without the necessary cultural capital. TPP students are constrained not only by the need to master academic discourse and literacy practices in a short time period, but may additionally be required to negotiate the bureaucratic and quasi legal language used to communicate university policy and practices. Much of the discourse sometimes referred to as academic English is effectively exclusive rather than inclusive and therefore represents a constraint to widening participation in Higher Education. This constraint could be reduced if TPP academic requirements were constructed in terms of familiarity with academic discursive and literacy practices rather than mastery and by a shift in university habitus towards reduction in the use of bureaucratic style of communication.

Although it is possible to separate and categorise constraints and forms of capital conceptually, it is the interrelationships between constraints and the way different forms of capital interact that impact on successful persistence with study. The findings of the study show, for example, how difficulties with communication constrain accumulation of academic and social capital that impact on obtaining cooperation with significant others. However, there is a great deal of variation in the way different factors interact at the individual level. It is not surprising that the overwhelming majority of TPP students and non-traditional students on other tertiary programs cite time constraints as a major factor in determining retention and attrition. Time available for study is inequitably distributed among the TPP student population but all students must study within the same time frame with little systemic flexibility. Structural constraints that reduce time for study are compounded by lack of cultural and social capital that might facilitate the transition process. TPP students need to accumulate sufficient cultural and academic capital within a very short period to match university requirements. Some students face multiple constraints and in the context of attrition and retention, the surprise is that so many students are able to successfully persist. Exactly how so many students are able to overcome constraints and attain their personal learning goals is the subject of the following chapter.

Chapter 5: Managing Constraints

5.1. Introduction

The previous chapter discussed the TPP student experience of constraints to successful persistence with study. The chapter utilised the conceptual framework of Bourdieu's social reproduction theory to discuss constraints as forms of capital. Social reproduction theory is a very useful framework for discussing constraints because the strength of the theory is its explanatory power in terms of the social and economic status quo and the role of education in preserving it. Chapter 4 argued that TPP students face a number of constraints and barriers to successful participation in pathway programs. Many of the constraints reflect structural factors related to social position and educational history and explain many of the difficulties experienced by socially and educationally disadvantaged students in their attempt to gain entry to university. The theory is less useful, however, as model of social change and in accounting for successful persistence with study. TPP is a long establish program and over the years thousands of students have entered university by alternative pathway programs such as TPP. Thus many students are able to exercise a considerable degree of agency over the constraints they face and many disadvantaged students succeed in managing constraints in such a way that they are successful in gaining entrance to university. This chapter will therefore present a discussion of the findings in relation to research question 2: How do TPP students manage constraints and persist with study?

The chapter begins with presentation of cases of successful persistence from the student perspective which challenge the concept of 'withdrawal from the program' and 'non-completion' as measured by universities. This is followed by discussion of the findings that illustrate how students manage constraints and the effects on persistence. First, an analyses is presented of the sources and types of support accessed by successful students, including family, work and the university. Two case studies will then be presented which contrast attempts to manage similar constraints by integrating support. Next, the discussion focusses on how successful students build personal capacity through development of communication capabilities and use

of reflective practice to develop personal efficacy. The next section examines the perspectives informing the findings by framing them against personal learning ecologies and personalised learning. A case study will be presented that demonstrates how one student was able to achieve her learning goals through development of a personal learning ecology. Overall the conclusion will argue that the development of a personal learning ecology (Jackson 2013) enables successful students to accumulate the forms of capital that provide them the confidence to successfully manage constraints and persist with study.

5.2. Re-evaluating goals

One of the indisputable findings in relation to the TTP experience is that, for some students, persistence is not the ultimate goal. Their recognition that tertiary study is not for them at that point in time is seen by them as being ultimately positive. The timeframe for achievement of personal goals does not always match the expectations of persistence or even the timeframe for course completion set by the university. A complicating factor is that a student who decides they are not capable or suitable for tertiary study may choose not to complete TPP but this outcome may be considered successful from the student's perspective because the individual has persisted long enough to evaluate the experience and decided an alternative future pathway is preferable. Other students who are recorded by the university as a 'fail did not complete' may have decided to postpone study to a future date and indeed many TPP participants are former students who have decided to re-enrol.

Cases from the present study illustrate these findings. Mott, for example, chose not to complete TPP despite achieving distinctions in most of his assignments. He was initially motived to study TPP *to find out if it suited him*. In the meantime he found a part-time job as a musician and decided that was his future career path and that he *no longer wished to pursue an academic route.* Another example of positive re-evaluation relates to Kev, whose life experiences provided alternative options. Kev was studying between 10 and 15 hours per week and achieving good grades while working part-time at a well-known fast food outlet. However he received a promotion to assistant manager which required additional working hours. He was also involved in campaigning for a well-known politician and had a number of other commitments. As a result of his new employment responsibilities, he found he could

only study 5 hours per week which was not enough in his estimation to attain his learning goals. He worked the extra hours *despite not needing the money* and recognized that he would *have to study at university at some later date to achieve his career ambitions,* but *doesn't feel like making the sacrifice yet.* (Kev)

These examples provide evidence of positive attrition and postponed study. They illustrate how student perceptions of success and persistence can change and do not always match the definitions and timeframes stipulated by traditional or institutional policy and practices. These examples do not suggest academic 'failure' but that some students have personal goals and motivations that do not require the completion of TPP with a passing grade. These examples underline the point made by McInnis et al (2000), that non-completion does not necessarily equate with failure, especially if 'success' and 'failure' are defined from a student perspective.

Furthermore, these experiences can be seen as positive from the perspective of lifelong learning and widening participation. Both Mott and Kev reflected on their TPP study experience as being *very positive,* and it is possible one or both may return to tertiary study at a future stage. The fact both felt confident that they could cope with tertiary study as a result of their TPP experience supports the argument that these two examples illustrate 'positive attrition'. They may in fact pass these positive experiences to their children who in turn may be more inclined to regard tertiary study as possible and doable for themselves.

This finding advances those delineated by previous research. The report of the study into retention and attrition in Enabling Programs (Hodges et al 2013) defines positive attrition in rather more negative terms, as students who find out through experience that they are not 'suited' to academia. This is 'positive' in the sense that it is better for individuals to 'try before they buy' and better to discover one is not suitable for tertiary study before committing to a HECS debt. However the examples cited from this study suggest that positive attrition may also include those students who decide they are able to match tertiary requirements and do see it as a future pathway, just not yet.

The term positive attrition should therefore embrace postponed study as well as strategic withdrawal from study. This conclusion is supported by evidence from the study of attrition on an enabling program at University of New England (Muldoon &

Wijeyewardene 2013) which found that most attrition resulted from students making informed choices about withdrawal, with the majority of students who withdrew suggesting they may decide to re-enrol in the same program at a later date. Thus strategic withdrawal is a strategy used by some students to attain long-term personal goals.

5.3. Developing persistence by accessing support

This section will explore the sources and types of support accessed by participants that were reported as facilitative of their successful persistence with study. These sources include the family, work colleagues, and the academic community.

Chapter 4 demonstrated that family and significant others can act as constraints to persistence if they do not have the will or capacity to support students' study endeavours. The research literature is equivocal about the role of family in assisting non-traditional students. In addition, research focussing on the role of family in discussions of social and cultural capital tends to concentrate on the role of parents and their capacity to positively influence the educational path of children (Rubin 2012). TPP is an adult education program and many of the participants have children of their own. This opens the possibility of viewing the role of significant others, for example, children or siblings, in addition to 'parents', as facilitators of study.

Studies depicting the role of family influence on transition to university have also tended to focus on first year undergraduates rather than students on pathway programs (O'Shea 2007, 2014; O'Shea & Stone 2011, Stone 2004). First year courses are discipline based whereas TPP is a general academic skills based program. There is limited research that explores the role of family members, including parents, in facilitating the transition process of tertiary students on pathway programs. This section also demonstrates the value of this project in that it explores pathways students' experiences and therefore adds to the studies on first year undergraduates (O'Shea 2007, 2014; O'Shea & Stone, 2011; Stone 2004). The data collected in this study supplements previous research by positing that family support is important for TPP students (as well as undergraduates) and that it is not only parents but children, siblings and significant others who can act as support.

5.3.1. Family support

The findings in this section show that the definition of family is widened from the more traditional understandings held about the sources of family support. Support for TPP students is augmented by siblings, partners, children, colleagues and friends as well as parents. In addition to the range of individuals providing the support, the section also overviews the different types of support these family members can provide.

5.3.1.1. Sources of family support

> *My older brother gave me some interesting feedback about Assignment 2, which he was familiar with having done online learning at different times over the years. His feedback has helped me to gain a better understanding of the assignment tasks, and to put my ideas into perspective more. I asked my son to read over the rough draft of my assignment, in regards to my English expression and grammar.*
> (Andy)

> *I have recognised that my husband is one of my resources and this will to help achieve my study goals.*
> (Rae)

Rae and Andy illustrate how different members of the family can provide access to forms of capital that are pivotal to supporting the study efforts of the TPP student. The support Andy sought enabled him to access cultural capital about the nature of online learning and how it differs from onsite learning, from a student experiential perspective. Andy made use of his son to proof read assignments, a resource commonly utilised by TPP students to assist with matching academic requirements related to literacy practices. This is usually proofreading and offering advice about formal expressions and grammatical structures deemed appropriate to assignment completion. Providing this kind of support does not require discipline or technical knowledge but helps TPP students to develop communicative competence in an academic context. These examples provide evidence that lack of experience of tertiary study can be compensated by access to cultural capital accessed through other family members, in this case a spouse, a son and a brother.

However, not every family member is able or willing to provide the type of support that students' feel they need or deserve. It is important that students are able to identify who is able to support their study efforts and in what capacity.

> *I have found over the past four months of studying the TPP program that my support system is not very supportive. My partner does not understand about the time which is needed to be put into each assignment, every day to complete tasks on time without adding any extra stress or pressure on myself……However I am most grateful for the times that my sister has offered to mind Raymond while I complete assignments*.
> (Catarina)

Although Catarina focusses on the lack of support from one family member it is important not to ignore the supporting role of her sister who freed up valuable time for study that would have been spent looking after children. A frequently reported time constraint was time spent on domestic duties or unpaid work, and therefore support in the form of help with looking after children or taking care of other domestic matters can be just as valuable to the time poor TPP student as help of a more traditional academic nature. This kind of help and support cannot be provided by the institution and may appear beyond the scope of the university support system.

Provision of academic support, however, is more dependent on a particular family member having the necessary discipline knowledge to help.

> *Throughout school I could never grasp the concept of linear equations or finding gradients. Assignment 5 was incredibly difficult for me and I became frustrated easily. On two occasions I gave up. I sought help in understanding the concept from my brother. I was still frustrated I couldn't work it out myself but I was thankful I had some level of understanding of it after my brother assisted me*.
> (Cath)

> *Had to Skype dad today for assistance with my maths as mum cannot give me any help. She has advised I contact the lecturer, but I find it difficult to know what to ask her. So I am waiting for dad to respond.*
> (Fred)

These testimonies also demonstrate that family members' assistance is sought in preference to approaching professional support staff. While this is a problematic aspect for students, in that they ignore sources of support provided for them, it also reinforces the notion that accessing support from family members is vital if students feel unable to ask for assistance from university staff.

Fred's explanation, *I find it difficult to know what to ask,* draws attention to the communicative difficulties of articulating support needs to academic staff. Under these circumstances, Fred prefers to rely on family members for academic support. Cath also has difficulties with maths and chose her brother as a source of support

rather than relying on USQ support systems. Other students concur about the difficulties in communicating support needs.

> *The hardest part of the course was asking for help….once I overcame my inhibitions I knew I could cope.*
> (Sue)

Sue reported difficulties *focussing on study and procrastinating because of Facebook, the phone, needing a drink or something to eat.* The solution to Sue's problem of procrastination was provided by her boyfriend *removing distractions and locking her in her room until a specific task had been complete*. Sue had already successfully completed TPP assignments related to time management and knew how to structure a study schedule, but it was the practical help offered by her boyfriend that enabled her to apply what had been learned from the TPP curriculum to her actual study context. This example illustrates an effective combination of formal and informal learning and how significant others can be a source of support even if the person providing the support does not have personal experience of tertiary education. Competence in communicating learning needs and successful management of relationships are prerequisite skills if this strategy for obtaining support is to be successfully applied.

Carol demonstrates her developing resilience as a tertiary student by seeking alternative sources of support when her primary source fails to satisfy her learning needs.

> *I know Colin* (Carol's partner, who is a school teacher) *has my best interest at heart and he just really want to see me succeed but sometime the way he tries to explain things frustrates the hell out of me I am not one of his year eight students… grrr. Eventually after a fruitlessly trail, I decided to seek help from study group in my local area to provided me with sufficient information required to address the task properly.*
> (Carol)

That some students were able to engage significant others in the learning process provided all the difference for their confidence in managing difficult concepts. Clara, for example, was able to use support from her sister to help clarify academic concepts.

> *I've just started testing the idea of explaining material I have just learnt to Gemma. The idea is that I learn something, practice it to make sure that I have it and then explain it to her to really cement it in my own mind. She's*

> *been awesome about it. She has her own studies and work to do but she always finds time to help me. Gemma has been really motivating for me. The idea works really well too. I find that once I've explained a concept to Gemma then it becomes clearer*. (Clara)

Clara illustrates the role of significant others in helping the TPP student to personalise the learning process by providing the opportunity to try different approaches to learning course content. Clara discovered that adoption of the 'teacher' role in relation to her sister clarified her own thinking in relation to TPP program content. Discussion of academic matters with significant others thus not only facilitates learning but adds to a collective pool of cultural capital that informs other family members about their capabilities to study at tertiary level. There is a kind of ripple effect as knowledge of how to fulfil the role of a tertiary student permeates through different parts of the microsystem. This ripple effect is crucial to the success of the whole widening access and participation initiative. In terms of cultural capital, the more TPP students involve others in the transition to university process, the more cultural capital is distributed within the microsystem.

5.3.1.2. Types of family support

The participants' evidence in the previous section illustrates that the range of family members able to offer support, covering a number of the new literacies and skills they were accessing. For example, Rae and Andy needed help and support about online learning and editing. Sam received different types of support from a range of family members.

> *Throughout this course I have had the full support of my son, his partner and my older brother. They have continually provided me with positive feedback and helped explain assignment requirements when I have been unsure about them. They have also analysed my written English expression in draft assignments. My son has pointed out to me on several occasions when I appear to be over-thinking my work, which I was fully aware of doing.*
> (Sam)

Accessing language and literacy support from family members was also highlighted by other participants in assisting them to persist with study:

> *English is not my first language so these studies have been very difficult for me. My wife however speaks English, and so I have asked her often to help explain words that I do not know. I also get her to look over my writing and help me fix the mistakes that I make. I also got her to help me*

> *understand the assignments, as I often do not know what to write or do not understand the questions.*
> (Derrick)

Chapter 4 noted that language and literacy difficulties can be a considerable constraint to successful persistence with study for many students, particularly those who do not have English as a first language. Low levels of literacy can compound difficulties associated with comprehension of teaching materials and completion of assignments. Derrick illustrates how help and support with basic English language and literacy practices can help clarify academic requirements while help with editing can improve presentation of assignments.

Other data confirms the positive role that various family members can play in providing discipline support. For example, competence in digital literacies is required for engagement with the TPP curriculum but many students commence the program with little experience or competence in this area. Mary discussed the role her sons played in helping her to succeed, nicely illustrating the kind of co-curricular support that can be garnered from family members.

> *The support I received from my sons when it came to computer skills was extremely valuable. Some of the first few assignments required different documents to be merged. Computer literacy is not a skill I had acquired before this course so my computer skills were almost non-existent……..I know that without their support and their happy to help attitude, completing this course may not have been possible for me.*
> (Mary)

Mary's evidence demonstrates how family can help students become more confident with digital literacy. As Mary illustrates, *a happy to help attitude* by significant others can be crucial to accumulation of academic capital necessary to meet university requirements. TPP requires assignment documents, tables and diagrams to be formatted according to prescribed specifications and to be submitted electronically. It is assumed TPP students have the necessary technical skills to comply with TPP academic regulations, but information literacies are not part of the TPP curriculum and so students who need this form of support may find it necessary to access non-USQ resources. Thus the capacity to accumulate academic capital necessary to conform to university requirements is predicated on successfully managing family relationships.

5.3.1.3 Summary of family support

Family and significant others are the most important sources of support for some students who are able to obtain curricular and co-curricular support in this context. To access support, some students need to overcome the constraint of not being able to articulate their learning needs to other family members. Once this is achieved, however, the family context can provide important academic, practical and moral support. For example, some students obtained editorial help with assignments and assistance in understanding feedback. Other academic support included help with understanding concepts, accumulating discipline knowledge and developing competencies with different forms of literacies that are prevalent in academia. Students in the study also report help with exploring alternative learning styles and overcoming procrastination. In addition, family members and significant others can be an important source of practical support in the form of helping with social responsibilities that free up time for the student to engage with study activities. Family members who provided support include brothers, sisters, parents and grandparents, as well as sons, daughters and significant others. Thus the family is an important source of cultural capital that facilitates successful persistence.

Reference was made in the literature review (see section 2.6.8.) about the role of family support. The literature revealed that the role of family in providing support at tertiary level is limited if parents have not accumulated the forms of cultural and academic capital that can facilitate tertiary study. The discussion of constraints in the previous chapter provided testimonies that some students themselves share this view, that family members are unlikely to be able to provide support if they have not experienced tertiary education themselves. The evidence presented in this section, however, shows that some types of support are of a very practical nature and do not require experience of tertiary education, but are nevertheless important to enabling persistence.

Other types of support requires some degree of familiarity with tertiary requirement but the evidence here shows that this type of support can be accessed through brothers, sisters or other family members besides parents. In addition, students can access important support resources in other parts of the microsystem provided they are able to recognize and communicate their learning needs. The family context is a potential source of social and cultural capital that can facilitate study but support is

predicated on the capacity to manage social relations and communicate learning needs to significant others rather than expect support as an entitlement.

Nevertheless, some students are not able to satisfy support needs within the family and therefore seek help from other contexts, such as the workplace.

5.3.2. Support at Work

While the family was the most frequently cited resource utilised by students to access and accumulate forms of capital that support successful persistence, other parts of the microsystem were also utilised, including the work place. Chapter four provided evidence demonstrating how paid work can be a considerable constraint to successful persistence. Some students worked long hours or under conditions that make study difficult, and the main effect of employment commitments was a perception by students that paid work reduced the amount of time available for study. On the other hand, some students were able to manage this constraint and some used the employment context as a source of capital, which included not only academic demands but also time management demands.

> *I utilised the assistance of my work colleagues to help me with certain parts of my study. In my third assignment under the Tertiary Preparation Program I sought the assistance of one of my work colleagues to proof read my assignment. This helped me to identify anything I had not answered correctly and any grammatical errors I had made. I asked another work colleague to proof read my next assignment which helped identify a couple of mistakes I had made.*
> Kev

> *Spoke to Sam at work tonight about parabolas. He was a great help and now I understand what I was doing wrong*.
> Rob

In addition to academic support, many students report that negotiating the hours of work with supervisors or colleagues was an important step in easing time constraints associated with employment commitments.

> *Work is starting to affect my studies. Craig asked me to work two hours later this afternoon, I said yes because I felt as though I had too. Now I'm getting behind in my maths assignment. I am going to sort this out soon so I can keep on top of my studies.*
> (John)

John was able to discuss his need for quality study time with his employer who thereafter was willing to consider his study activities when deciding work rosters. Many students report the liberating effect of negotiating and discussing study needs with employers who are sometimes flexible and willing to support students in their study efforts. This is another example of the positive benefits of developing good communication skills. Many students report an unwillingness to seek this kind of support from employers, or indeed from other parts of the microsystem. The capacity to recognise and communicate support needs is just as important an aspect of learning to be a tertiary student as acquisition of traditional academic skills.

The employment context is an important source of support for some students. In addition to study support in the form of help with assignment preparation and discipline knowledge, some students were able to achieve improved terms and conditions of employment more convenient for study purposes.

5.3.3. University support

While family and work support are often crucial, recognizing support needs and the resources above those of the family and work to satisfy students' needs are important aspects of developing competencies that facilitate persistence. Learning to access and utilise available university resources is part of the cultural capital necessary for persistence at tertiary level. Pathway students need to learn how to go about the business of learning at university in an efficient and effective way and need to develop competencies that enable them to benefit from human and material resources that enable them to achieve personal learning goals.

5.3.3.1. University resources

> *Sometimes asking for help is all that you need to do from family and friends. If they are unable to help there is also help offered via the university's services. Often the lectures are willing to give you as much help as they are able to provide, otherwise another service like student support can help as they did with the Centrelink issue.*
> (Brock)

The importance of providing support for transition students has permeated the literature pertaining to widening participation in Higher Education. For example (Tinto 2008) claims access without support is not opportunity and most Australian universities seek to provide support through formal mechanisms. Nevertheless,

institutional attempts to provide support mechanisms have not always met with success (Simpson 2008), and a low rate of use of student support services was cited as a major contributor to lack of persistence in enabling retention in pathway programs, including TPP (Hodges et al 2013).

Mat is a mature aged students who has not studied for 30 years. Although she has daughters who have successful tertiary experience she found that support *was not always forthcoming.* She reports that her daughters advised her tertiary study would be *too difficult for her*. Mat stated her objective was to find out if she was *good enough* for university level studies and wanted to *find her limits*. She attributes her successful persistence with study not to her own efforts but *to the vast amounts of help and support* she received from the teaching and learning community. Mat was able to spend a great deal of time on study (about 30 hours per week) and utilised many USQ resources including meet-up and workshops on academic writing that were actually intended for undergraduates.

While it might be argued that Mat had sufficient economic capital to allow her to study 30 hours per week, it could also be argued that her success was greatly facilitated by the fact she was able to identify her learning needs and the fact the (USQ) resources available that satisfied her learning needs were available to satisfy those needs. On this occasion formal USQ support mechanisms were utilised in conjunction with other targeted resources within the teaching and learning community to compensate for perceived lack of support from her family. Thus there are multiple resources within the teaching and learning community that may provide access to the forms of cultural capital necessary to facilitate successful transition to university but choosing the optimum range of resources is a personalised decision that may reflect individual circumstances and social relations.

5.3.3.2. Social resources at university

While provision of professional support services has had mixed success, the importance of social contacts in the student retention literature is well established (for example, Wilcox, Winn & Fyvie-Gauld 2005). Social integration with the university community is an important part of becoming a tertiary student according to the social and academic model of persistence discussed in chapter two. The relationship between social capital and educational attainment is one of the most

robust relationships in social science research even although the mechanisms involved may not be fully understood (Field 2003, p53). Thus there has been a great deal of research that shows the importance of social support at university for undergraduates but there is no published research that explores the role of social support in pathway programs. The previous section examined social support within the microsystem and this section will therefore discuss the types and sources of support accessed by TPP students in the university context that facilitated successful persistence.

5.3.3.3. Building a support network at university

The process of learning about academic culture is frequently dependent on accumulation of social and cultural capital that is driven by student to student interaction in addition to engagement with the curriculum.

> *When I started the TPP course, I didn't know anyone in the class but I could see early on that the course was going to be really challenging if I remained on my own. So I introduced myself to two other students sitting together. We became friends and from there we decided to get together on a regular basis to discuss any issues we were having with TPP. After another week or so, two others joined us and we decided to meet fortnightly. The ways in which we supported were by advice with assignments, modules and learning activities, moral support and motivation.*
> (Walter)

Engagement with the formal curriculum was facilitated by Walter's informal learning, enabled through accumulation of social capital. It is assumed that students know how to complete assignments and know how to engage with learning materials and therefore these aspects of matching academic requirements at tertiary level are not always made explicit in teaching materials. Similarly, instruction in how to engage with peers in collaborative learning, is not part of the TPP curriculum. Nevertheless, Walter was supported by advisement on learning and assignment completion, accessed through development of social capital in the form of a support network. In this particular example, the support network is dependent on attendance at onsite support classes, a resource not available to all TPP students.

> *I am struggling with the course, not in the sense of doing the work, but I'm finding it difficult to determine the direction of the materials.*
> (Bob)

Bob received a number of responses from peers who not only provided information but also moral support that can promote emotional resilience and prevent feelings of isolation. Dealing with negative emotional responses to the study experience are an important aspect of learning to cope and the social forum is an example of an online resource commonly cited as beneficial to promotion of emotional resilience.

5.3.3.4. Online peer support

Online forums assisted students to become more familiar with university practices and contributed to their persistence. For students unable to attend classes, the constraint of distance from campus is partially alleviated by the opportunity to build social capital through the online social forum. Here students can pose and answer each other's questions and share course concerns, and if necessary have a member of staff clarify matters related to USQ practices and procedures as well as academic matters.

> *I found that the social forums were some of the most useful forms of learning support. If I wasn't sure about something I would look it up on the forum and nearly every time I found the information that I needed. If I didn't find what I needed in the forums I would ask my wife who has studied some similar materials in the past.*
> (Brad)

The exchanges of information on the social forum provide examples of informal learning related to numerous aspects of the curriculum but also crucial information about forms of cultural capital that can assist the transition process, particularly in relation to questions about 'how to go about things' (learning how to fulfil the role of tertiary student).The example of Brad underlines the important role of social capital in developing learner know-how about tertiary study. Student engagement with the TPP program does not always require input from academics or professional support staff, but they do have a role in ensuring students have the communication and technical skills to take advantage of online support. Peer support and social capital are important resources that assist students to cope with stress and pressure, especially in relation to assignment deadlines and exams. Some students find it easier to communicate support needs to peers or significant others rather than academics or professional support staff.

> *I found it really easy to interact with other students on the social forum as well as Facebook and in a class situation, these interactions are often very*

> *helpful and more than once my friends and family have helped me out of a bad situation with assignments by the simple virtue of being there to talk to. At one point I had an anxiety attack because I wasn't coping well with the upcoming essay that was due but because of the network I had built with the other TPP students and my other friends I managed to get the assignment done on time and to standard*.
> (Nat)
>
> *I found the social forum to be a fantastic way to put across any questions or requests for clarification. Fellow students would often respond I found this incredibly helpful. It was also comforting to have a little reminder that I am not alone doing this course*.
> (Petra)

'……*that I am not alone in this course'* nicely illustrates the value of developing a support network. Petra's comments about the social forum allude not only to the value of the information provided but to the communicative style used by peers to discuss academic issues, using less formal language than is normally associated with academia. Difficulties communicating with academics represents a constraint for some students and therefore obtaining support from peer learners is a good strategy to adopt. Peer support, however, is just as dependent on good communication skills as interaction with academics. The comment about the social forum as a source of comfort is a useful reminder that the transition process is not only cognitively challenging but also emotionally challenging for many students.

Developing the capacity to communicate and collaborate online with peer learners is an important part of learning at tertiary level and the testimony of Petra and others in this study demonstrate it can support developing resilience by providing an emotional buffer to the disruption to relationships and routines that can result from the decision to embark on a pathway program. Peer to peer interaction on the study forum is a particularly valuable source of support for students like Petra who live too far away from a campus to benefit from face to face support. Peer-assisted study as a learning strategy has been recognised and incorporated into the first year pedagogy in Australian universities for some considerable time (Morrison 2007) but to date there is little published research about the role of peer learning in pathway programs.

Evidence from this study supports the view expressed by Stodd et al (2015) that technology provides the connection and space for the teaching and learning community to interact in a way that allows USQ to have a presence while allowing students to shape activities and interaction that takes place there. Online

collaborative learning depends as much on communicative competence as formal academic skills and knowledge. Development of communication skills to enable participation in peer learning is part of the suite of literacies that is necessary for successful tertiary study at USQ. Relevant skills to develop this form of communicative competence cannot be assumed but should be part of the curriculum. Communicating at university involves more than writing a competent essay.

5.3.3.5. Summary of university support

Findings from this study confirm the importance of social support in the university context. Formal university support systems such as meet-ups, academic workshops, tutor assistance and advisement from professional staff are all important resources utilized by some TPP students. The findings also indicate however, that communication between students and staff at university can be a constraint especially if attempts by the university to communicate with students are perceived as impersonal. Testimonies from this study, however, underline the importance of buildings personal relationships at university. Becoming proactive in communicating with tutors was evidence of increasing confidence levels and development of a sense of entitlement in students. Proactive communication on the part of a tutor resulted in one student feeling less like a number and fostered a deeper sense of commitment and belonging to the institution.

Development of communicative competence underpinned many of the strategies employed by students to build social capital. Building a support network is an important part of becoming a tertiary student. Engagement with peers and collaborative learning was very important in accumulating social and cultural capital that facilitate successful persistence. This section provided examples of how onsite and online learners support each other by advisement on assignment completion, encouragement to persist despite difficulties, advice about ‘getting things done’ and clarification about meeting academic requirements. One of the distinct advantages of accessing support from peer learners is the style of communication used to provide explanations and give advice and encouragement. Students in this study reported the interactive style of peers as inclusive and empathic and the opportunity to learn about tertiary study informally on the social forum supplemented formal learning in the curriculum.

5.3.3.6. Overview of sources and types of support

Table 5.1 summarises the main sources of support and the types of support students received, based on student quotes in this section. Figure Table 5.2 summarises the range of resources used to manage constraints and the competencies developed from the perspective of Lifelong and Life wide learning.

Table 5.1: Summary of support sources and types of support accessed

Student	Source of Support	Types of Support
Andy	Older brother	Learning strategies
Ray	Husband	Moral support and encouragement
Cath	brother	maths
Fred	father	maths
Sue	boyfriend	Procrastination and asking for help
Mary	sons	Computer literacy
Derrick	wife	Language and literacy
Clara	sister	Conceptual clarification
Catarina	sister	Child minding
Carol	Study group	Clearer explanations
Kev	Work colleagues	Proof reading and grammar
Rob	Work colleagues	maths
John	supervisor	Negotiate work hours/conditions
Walter	Study group	Academic work
Brad	Social forum (then wife)	clarification
Nat	Social forum, Facebook, classmates	Emotional resilience
Bob	Social forum	Course layout
Petra	Social forum	Clarification and connectedness

Table 5.2: Summary of resources used to manage constraints and competencies developed

Resources	Constraints	Competencies	Life wide and lifelong learning
• Family and significant others (work colleagues) • University • Peer study groups • Formal meet-ups • Social Forum • USQ personnel • TPP curriculum	Procrastination Low motivation Conceptual difficulties Study habits Discipline knowledge Responsibility conflicts Self-regulation Technical skills	Time and study management skills Computer Formal language use Mathematical knowledge Cultural norms of academia Help seeking behaviour Pragmatic competence in academic discourse	Development of transferable skills such as use of computers, Management of social relations within microsystem Development of resilience Learning to learn in a new cultural situational context

5.3.4. Integrating support sources - contrasting cases

To extrapolate from the findings in this section two contrasting cases will be outlined. The first case study demonstrates a student who was able to access multiple sources of support to manage constraints.

Linda was able to carry out a number of changes that facilitated persistence. In particular, reassessment of priorities and manipulation of circumstances to her advantage, enabled her to manage constraints. For example, Linda found TPP a bit of an *eye opener in the beginning* and she *struggled academically* to match TPP assignment requirements. She *worked 50 hours per week* and *fell behind*. Linda was on the point of withdrawing from study but was urged to seek help from USQ by her partner whom she describes as *very encouraging and supportive.* USQ support services made her aware of the possibility of seeking an extension to the normal period of study. She subsequently changed jobs which allowed her to study *20 hours per week compared to 10-15 hours* previously. The change in employment reflected her *change in priorities*. She also attributes her persistence to friends who *had*

experience of tertiary education and who reassured her that *coping with time pressures* was a *'normal'* part of becoming a tertiary student. Ultimately Lynda was able to successfully complete TPP because she had enough economic capital to allow her to change to employment more facilitative of study. She also had access to social and cultural capital in the form of friends with experience of tertiary education that facilitated successful persistence.

The second case study illustrates failure to manage constraints.

Anthony wasn't able to 'control' his circumstances. He works full time (40 hours) as a truck driver and successfully passed 4 TPP assignments. He decided to withdraw from study because *time constraints did not allow me enough time to complete assignments to my own standards,* even although he felt able *to pass the course*. However Anthony also reported that he was asked *to do overtime at work* which he felt *was expected* of him and *was non-negotiable*. Additional time constraints related *to feeling guilty at reducing family time* even although he reports his wife was *fully supportive* of his study efforts. Anthony also explained that he was unaware of the possibility of extending the period of study into the following semester and did not seek help from USQ or from any part of the microsystem because he *didn't think it would help*.

Anthony illustrates how the interactive effects of lack of economic (structural constraint) and cultural capital (agency constraint) can result in a very isolated study experience. The disjunction between Anthony's expectations of himself in relation to TPP academic requirements, evidenced by his comments that his personal standards were higher than demanded by TPP, are unrealistic in the longer term, reflecting lack of cultural capital and insight into the nature of tertiary study. Anthony's expression of guilt, rooted in his perception that he neglected family responsibilities because of study commitments, compounds the negative affects resulting from attempts to reconcile his new identity as student with his identity as worker and family man.

These negative influences on 'fitting in' is evidence that it is not just a matter of students feeling comfortable with the habitus of the institution that influences persistence with study, but mature-age students need considerable support in coping with role and identity shift that is part of the transition process. Previous research has established role and identity conflict as a constraint to persistence in relation to

mature-age females (O'Shea 2007; 2015) who were first in family to study at undergraduate level, but the evidence presented here shows that mature-aged male students experience similar difficulties in reconciling the student role with family responsibilities. Anthony felt unable to continue with TPP not because he failed to match academic requirements but because he could not access appropriate support resources that could have facilitated study. Although the situational context of study was not ideal, the constraints faced by Anthony were not substantially different from those of many other TPP students described in the previous chapter or those faced by Linda.

The contrasting case studies demonstrate that it is not so much the nature of constraints per se that determine persistence but the way in which resources are accessed and utilized that influence students capacity to persist with study. The finding that 'successful completers' face very similar constraints to 'non-completers' is supported by research evidence from a study of factors affecting retention and attrition in distance education at University of Tasmania (Rowlands 2004). Rowlands focused on FYE of non-traditional entrants from remote geographical areas of Tasmania and did not include pathway students. Nevertheless the current study confirms Rowland's (2004) research by providing evidence that cultural constraints are just as influential in determining educational outcomes as academic factors. Cultural factors also influence the way students interpret and respond to changes in family resources that can provide support.

The next section explores the ways the respondents' personal and interpersonal capabilities facilitated their perseverance at university.

5.4. Building personal capacity

5.4.1. Introduction

Chapter 4 argued that communication and interpersonal constraints are a significant constraint to persistence in TPP. It was shown that lack of experience and unfamiliarity with tertiary study practices mean that TPP students are very reliant on support to achieve their study goals. This requires students to recognize their study needs and assertively educate others about them. This section will explore whether, and how, students' personal and interpersonal capabilities facilitated persistence with

study in TPP. The role of communication capabilities and use of reflective practice to enhance personal efficacy will be examined.

5.4.2. Communication capabilities

Accessing support, whether from family, significant others or work colleagues, depends on the use of effective communication capabilities or skills. These capabilities depend on knowing who, how, when and where to ask for assistance (Lawrence 2009). In communication theory these skills are referred to as audience and task analysis and are especially important in the university context where students need to become familiar with dealing with a range of staff.

> *I couldn't believe it when I actually got a phone call from a lecturer the other day, chatted about my awful assignment and felt really good after, more connected. I felt like just a number before then but now feel like an actual student.*
> (Gordon)

This quote shows how lecturers can assist students to be more proactive in seeking the support they need. There is a reasonable chance that Gordon will become more proactive in seeking support now that the tutor has taken the initiative.

> *I often email or speak to my lecturer to make appointments after class to receive feedback on my assessment.*
> (Leanne)

Leanne's evidence underlines the importance of being proactive in developing good communication with university staff. Good communication is predicated on communicative competence by both parties in a dialogical relationship where there is a shared universe of discourse. Persistence is facilitated if students know the names of advisors that can be personally contacted and with whom they can develop a working relationship over the duration of the program (James et al 2010; Krause 2005; Simpson 2008).

Leanne, in particular, illustrates a growing sense of assertiveness in accessing human support resources. Reay (2009) argues that many non-traditional students lack of a sense of 'entitlement' and this acts as a constraint to seeking support from academics. The need to develop the communicative capacity to assertively ask for support was identified in the previous chapter as an important component of cultural capital. The quote from Gordon, however, underlines the importance of proactive

communication on the part of academics to personalisation of the learning process and fostering a sense of entitlement in non-traditional students. Good communication between students and university staff requires they share the same universe of discourse and the use of language Gordon describes as 'chat'.

One of the constraints identified in the previous chapter were low levels of interpersonal capital that sometimes leads to strained communication with university staff. Communication is a two way process and can be strained if the two sides in a dialogue do not share the same linguistic code or register. This was evidenced by the comments from students who indicated they had difficulties understanding feedback from assignments. In this situation some students adopt the strategy of seeking support from family or peer learners in the online forum. Some students, however, adopt alternative or additional strategies that improve communication between students and staff.

> *There are times I am often emailing my lecturer quite late at night letting her know to expect a phone call from me in the morning to request some feedback.*
> (Leanne)

While Leanne's perspective fails to take account of lecturers' workloads (managing sometimes hundreds of students) she demonstrates that she has learned to proactively manage her constraints. (This example shows in fact how the lecturer needs to use expectations management to show Leanne that her expectations are unrealistic….just as Leanne has used expectations management to try to arrange help for herself.)

The role of the tutors in facilitating student development is important in enhancing persistence. Promoting a sense of 'fitting in' involves more than students adopting strategies to accumulate interpersonal capital. Successful students utilize interactions with academics to accumulate academic and cultural capital that facilitate study. The quotes from Leanne and Gordon demonstrate the importance of sharing the same universe of discourse and matching cultural expectations. This does not always happen in exchanges between students and academic staff, as was evidenced by some of the constraints noted in chapter 4. Constraints often arise because communication between students and staff is a 'between cultures' exchange rather than an intercultural exchange (Lawrence 2006). Academics need to be empathic to the communicative needs of students, in the way demonstrated by the tutor in the quote

from Gordon, in order to 'bridge' the cultural divide between students and academics (Devlin 2013). Communicative competence on the part of students and academics is necessary to bridge the gap between the cultural practices that dominate the university habitus and separate it from that of the rest of the microsystem. Linguistic practices should not be exclusive and should be inclusive if widening participation is to succeed.

Chapter 4 identified unfamiliarity with academic discourse and literacy practices as a major constraint for some students, most notably those whose first language is not English. Professional language instructors and feedback from academic assignments can be regarded as examples of professional support resources provided by USQ, but many students benefited from using a combination of formal and informal support mechanisms to overcome communication difficulties. For example, Marco reportedly experienced *difficulties understanding assignment* requirements because of *reading difficulties*. To overcome these difficulties Marco utilised *assignment feedback, asked for help from TPP and EAP tutors*, utilised *student support services*, joined *a study group, studied with a fellow student* and *received significant help from a relative.* Ultimately Marco was able to successfully obtain support from both university and family sources.

> *To make sure I understand the task or the readings I ask a family member to read the same thing I have just read and I will explain to them what it means or what I have to do. That way I will know exactly what I have just read and if I make a mistake my family member will tell me and describe in a way I understand.*
> (Marco)

Marco's evidence illustrates how some TPP students are able to manage the interactive effects of multiple constraints by utilising support resources from within the teaching and learning community as well as the family context. The support Marco received was predicated on his capacity to identify his learning needs and communicate them to significant others in a way which encouraged their support. Thus successful persistence often depends on development of interpersonal and communication skills necessary to obtain support in different contexts.

5.4.3. Reflective practice

Chapter 4 discussed the constraints to successful persistence with study that can result from misunderstandings about the nature of tertiary study and adoption of unrealistic expectations. When TPP students reflect on their study experience and analyse what they have learned about tertiary study, they commonly discuss help seeking behaviour and a cultural shift in their expectations about the nature of undergraduate study. For example Margaret was able to achieve her personal goals at the second time of taking TPP. She reports the first attempt as *highly stressful* because she attempted to *go it alone* but did not understand how to match course requirements. On her second attempt, however, she *understood exactly what to do* and when she needed help Margaret *emailed lecturers* and benefited from *peer interaction on the student forum.* She attributes her success to:

> *learning from my previous experience to be proactive and get help when it is needed*. (Margaret)

The reflections described by Margaret illustrate transformation of beliefs about the nature of learning at tertiary level and the emergence of a confident learner identity. Her insight that successful study was largely dependent on identifying supporting resources was a crucial aspect of accumulating cultural capital that will facilitate future study efforts. The comments about knowing *exactly what to do* further evidences the accumulation of cultural capital and a corresponding increase in self-efficacy. The comments about the value of peer to peer interaction contrasts with *going it alone*, providing evidence of a realisation that study is an interdependent activity that requires accumulation of social capital predicated on good social relations and connections. From a lifelong and life wide learning perspective, transformations to sense of self and development of social relations are crucial to learning and development across the lifespan (Baxter-Magolda 2009) Thus the benefits of reflective practice gained in TPP are transferable not only to undergraduate study but also in relation to future career paths.

Occasionally students enrol who have prior experience of undergraduate level study. For example, Chris shows the benefits of her 'strategic withdrawal' from an undergraduate course as an opportunity to reflect on experience in a way that informs future study practices. Chris had previously failed to complete a law degree at a different institution and attributed her previous lack of success to *poor time management skills and health constraints* which prevented *attending classes on campus*. She matched the academic requirements of TPP *with ease* but believed her practical application of time management skills and use of a study plan

were important to enabling successful persistence; skills she *had lacked* in her previous attempt at tertiary study. While many of these skills are a part of the formal curriculum of TPP, Chris attributes her success more to *learning how to get support*. She *emailed lecturers for academic advice, received financial and emotional support from a significant other and frequently interacted with peers on the social forum.* Chris reports that the nature of her health constraints meant she was *effectively bed-ridden for much of the time* and therefore being able to study online without face-to-face contact was experienced positively as a helpful resource.

Students, like Chris, who have a capacity to reflect on their earlier educational experience, were able to facilitate identification of strategies and resources within the microsystem that enabled them to manage constraints and support their efforts to achieve personal learning goals. While Chris was able to use USQ and significant others as resources, she did not regard family as source of cultural capital *because they have no experience of higher education themselves so don't have much to contribute*. Chris was able to achieve her learning goals because she personalised the learning process through identification and use of supporting resources that satisfied her particular situational needs. The capacity to self-diagnose learning needs and identify resources that can satisfy them is an important part of self-regulation and part of tertiary study management that constitutes formation of a personal learning ecology (PLE). Formation of a PLE is central to learning how to persist with university study but is also an important component of life wide and lifelong learning (Jackson 2014), evidenced by the following quote from Chris.

> *Learning how to manage my study skills was the best knowledge I could have obtained. These skills will help me in my future studies at university. I will be using these skills even after I leave university.*
> (Chris)

5.4.4. Developing personal efficacy

Developing personal efficacy can emanate from students' use of reflective practice. Some students, for example, realise upon reflection that some sources of support do not suit their personal learning style. Gloria learned through reflective practice and engagement with the TPP curriculum that her sources of support did not really facilitate study. Nevertheless her growing sense of self as a tertiary learner may be construed as an intrapersonal resource that

facilitated persistence. For some students developing these capacities meant taking emotional risks.

> *I am a terribly social person, in discovering my learning styles it dawned on me like a light bulb!! I always thought I did better studying in a group. I do not achieve anything, I do not study I socialise. I have found by looking at previous journal entries that I have much better progress in studying by myself*.
> (Gloria)

> *I learned that I can still keep up with studying and still do things in my personal life if I get family and friends help when it comes to looking after the kids while I am studying*.
> (Jean)

While family and peer support are valuable resources, many students recognise the need to seek more formal support mechanisms from the university. However, as many students are reluctant to take this step, their success may depend on their activation of interpersonal and communication capital.

> *During my studies there were times when help was required. I was very reluctant to use the social forums provided as I am a private person and would rather not receive help than to tell everyone that I need it. Having the telephone support system available provided me with another option. I felt extremely anxious about using this support system as well but the need for help left me with no choice. I then accepted that I had to call.*
> (Jack)

This evidence illustrates different aspects of the interrelationship between support resources, interpersonal relationships and transformation of learner identity (intrapersonal relations). Thus a significant finding is that successful persistence is enhanced by the capacity to not only recognise support needs but also includes the capacity to access resources that can satisfy those needs. Accessing support can involve overcoming inhibitions and anxieties, or as Jack described it, *stepping out of my comfort zone*. Jean learned that by getting help with childcare duties social capital is critical to successful persistence, while Gloria learned the difference between being social and benefiting from social capital. In each of the quotes we see evidence of a developing learner ecology.

For some students a necessary step in development of a learning ecology is then students' assertive management of social relations that empowers them to prioritise their own development needs in the face of criticism or lack of support from significant others. For example, Norma reported her constraint as… *trying to please the people in my life while still getting enough time to study*. She is a working single parent with two young children. She

received criticism from friends and family for neglecting them but this effectively increased rather than decreased her motivation to obtain her goals. She *prioritised study activities two days a week* and *stayed at the library* rather than go home which *gave quality time for study*. This resulted in *less stress* and during these two days she *attended meet-ups, writing workshops, and used the social forum* where she discovered other people with similar responsibility conflicts. She attributes attainment of her personal goals to accessing *help when she needed it and other students and attendance at USQ workshops;* examples of informal and formal learning across different contexts but resulting in development of a personal learning ecology that significantly enhanced her capacity to successfully persist with study
(Norma).

Norma's success in achieving her learning goals is attributable to her capacity to utilise resources and transform social relations to allow time and space for study. She was able to learn from other students' experience of responsibility conflict, further underlining the value of peer contacts and social capital in development of resilience and self-efficacy.

5.5. Perspectives Informing the Findings

This section will examine the findings of the study from the perspectives of Lifelong Learning and widening participation in Higher Education. The role of formal and informal learning in different contexts will be assessed in relation to the development of personal learning ecologies (PLE). The section will also examine the role of resource and relationship management in personalization of the learning process and development of a PLE. A case study will be presented of how one student was able to develop a PLE and successfully attain her learning goals by successfully persisting with study.

5.5.1. Personal Learning Ecologies

Learning in educational institutions is often conceived in terms of cognitive functioning or acquisition of a body of knowledge or a set of skills. This type of learning is valuable and necessary but is not characteristic of how people learn throughout the lifespan. Lifelong learning spans different domains and contexts such as the work place, the home, sporting activities, hobbies, friendships and other types of human relationship (Burnett 2011; Jackson 2014). This framework of lifelong and life wide learning recognizes that learning is situated across different spaces and times and personal development in a pathway program such as TPP is a product of formal and informal learning in a number of spaces or contexts involving

curricular, co-curricular and extra-curricular activities. The TPP curriculum is only one of a number of resources distributed across different spaces that facilitate development. Relationships with USQ are only one set of relationships that need to be nurtured and managed to successfully attain study goals. Thus, a personal learning ecology is a way of describing the interrelationship between an individual's learning contexts, resources and relationships.

The intrapersonal context can include beliefs, values and dispositions of the learner based on past experience and is therefore inclusive of what in Bourdieu's framework constitutes the habitus. Individual development depends on relationships and resources in each context, including USQ and its systems. Relationships typically include family, workplace, tutors and academic staff, and peer learners. Resources include experiences, money, time, teachers, librarians, counsellors, approaches to learning, World Wide Web, books; in fact, anything available to the student that facilitates learning can be used as a resource. Learning ecologies therefore comprise the learning environment, the interpersonal relationships with significant others that impact on learning, and intrapersonal processes, such as development of a new (learner) identity. Changes which occur in one of the elements will have an effect on the others. For example, perceived lack of family support (resource) will reduce the quality of family relationships and also restrict the learning context. By way of contrast, gaining support from a family member will increase the quality of the relationship and widen the learning context. Development of a learning ecology is dependent on a number of competencies. Students need to develop the capacity to identify, access and utilise resources that enable accumulation of capital. They must also develop competencies related to management of extant relationships, in addition to the capacity to foster social relations in new contexts. Communication and interpersonal capitals are central to development of a personal learning ecology. Figure 5.1 (adapted from Staron 2011) illustrates the non-hierarchical relationship between the elements that constitute a Personal Learning Ecology.

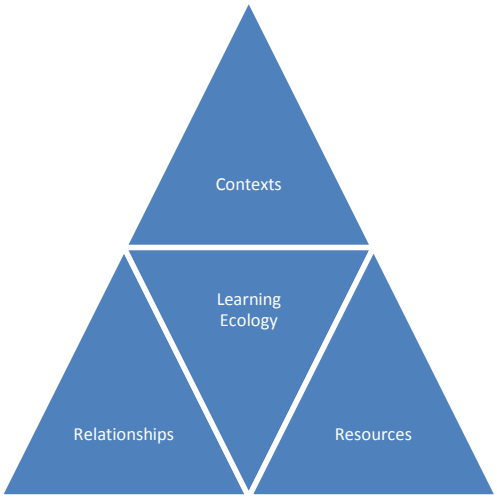


Figure 5.1. Key Elements of a Personal Learning Ecology

5.5.2. Personalised Learning

Personalisation of the learning process begins with students setting individual goals and targets, such as successfully completing TPP and gaining entry to an undergraduate degree. The individual gradually creates a personal learning ecology to facilitate learning and development in line with this goal. The learning ecology develops through interactions between different processes and relationships which are connected. The most obvious process and set of relationships a TPP student will engage with are the TPP program. This involves reading set materials, completing learning activities and assignments, and engagement with structured activities intended to build competence in key skills and knowledge.

However TPP also provides spaces for students to build relationships and establish connections through, for example, Meet-Up and Study Desk in addition to other online resources. Unlike curricular activity which is a compulsory component of the program, individuals are free to choose levels of engagement with co-curricular activities and therefore it is up to individuals to establish relationships and utilise resources that facilitate connections. Personalisation of the learning process is dependent on learning to collaborate and communicate to solve problems, in addition to acquisition of 'traditional' academic skills and knowledge (Stodd et al 2014).

Some people take more advantage of these learning opportunities than others but it will be shown in the discussion that follows that accessing and utilising a wide range of resources and development of key relationships is central to learning how to learn at university and therefore critical to successful persistence with study. Family, friends, peers, work colleagues and others in the microsystem represent possible resources that can be utilised to accumulate forms of cultural capital that enable individuals to achieve personal learning goals. Experienced learners use a greater number and variety of resources (Barron 2006) and therefore utilisation of more resources and evidence of good management of social relations during course progression is a manifestation of successful learning. As Jackson (2014, p.24) describes it, a learning ecology is *'the process (es) we create in a particular context for a particular purpose that provides us with opportunities, relationships and resources for learning, development and achievement'*.

5.5.3 Case study: personal learning ecology

The case study which follows provides an example of how one student, Martina, developed a PLE. It has been chosen because many of the constraints reported by Martina are representative of those reported in the previous chapter. In addition, the measures taken by Martina to overcome constraints are illustrative of many of the strategies and approaches to study that TPP students report using to enable successful persistence.

Martina is a single mother with a full time job who had not studied for 27 years prior to enrolling in TPP. In addition, she did not complete year 12 of high school and therefore may be considered somewhat typical of the TPP cohort in terms of previous academic experience and non-study commitments. Martina was a highly successful TPP student and she attributes her success to *organisational skills* or the ability to self-regulate (skills acquired through formal learning of the curriculum but also informally through meeting workplace and home life requirements). In week six of the course she reported time constraints related to non-study commitments and the challenge of *prioritising study over spending time with her teenagers who complained about being ignored*. She also reported difficulties matching USQ requirements because she had an initial tendency *to leave assignments to the last minute* although by the end of the course she describes herself as *extremely proficient at accessing the abundance of learning material available*….The following account of how Martina accumulated capital from different parts of the microsystem demonstrates how learning at tertiary level occurs in a variety of spaces.

Martina was able to communicate her learning needs to significant others in an assertive way. She *negotiated with her employer to ascribe working hours more amenable to study and attendance at on campus classes,* even although she received no actual study concessions. She *negotiated with her children* to carry out some extra domestic duties such as *cooking and gardening*. She utilised her parents to *transport children to school and sporting events*. Thus she was able to manage her study environment effectively and increase time available for study. She also adopted strategies to use her study time more effectively. She *overcame her shyness* and became *more participative* in classes *and demanded more from tutors.* She collaborated with *a study buddy who helped with maths while I helped her with English* and she attended student Meet-ups where she *gained insight into USQ expectations* and learned to match academic requirements by *giving the expected answer rather than the truth*.

Martina's PLE encompassed the virtual as well as the 'real 'classroom, co-curricular settings, employment and the family home. Her intrapersonal development is evidenced by increased self-efficacy and a sense of self as a learner able to self-regulate. Her communication and interpersonal capital enabled her to successfully manage personal and professional relationships, communicate her learning needs and facilitated cooperation with others. Martina accumulated forms of capital by learning to access and exploit a range of human and material resources distributed across different parts of the microsystem and managed relationships that further increased her growing reservoir of social and cultural capital. There is a strong sense of agency in the way Martina self-regulated her study contexts. She structured the learning environment and acted as an agent of change in transformation of key social relationships. There is an obvious increase in self-efficacy and confidence in the comment *demanded more from tutors*. The experience of successful transition reported by Martina underlines that successful persistence in TPP requires students to adopt what Jackson (2014) describes as 'a new culture of learning', in which people learn through interaction and participation with one another in fluid relationships that are the result of shared interests and opportunity.

The personal development of Martina is represented in the following diagram based on her PLE.

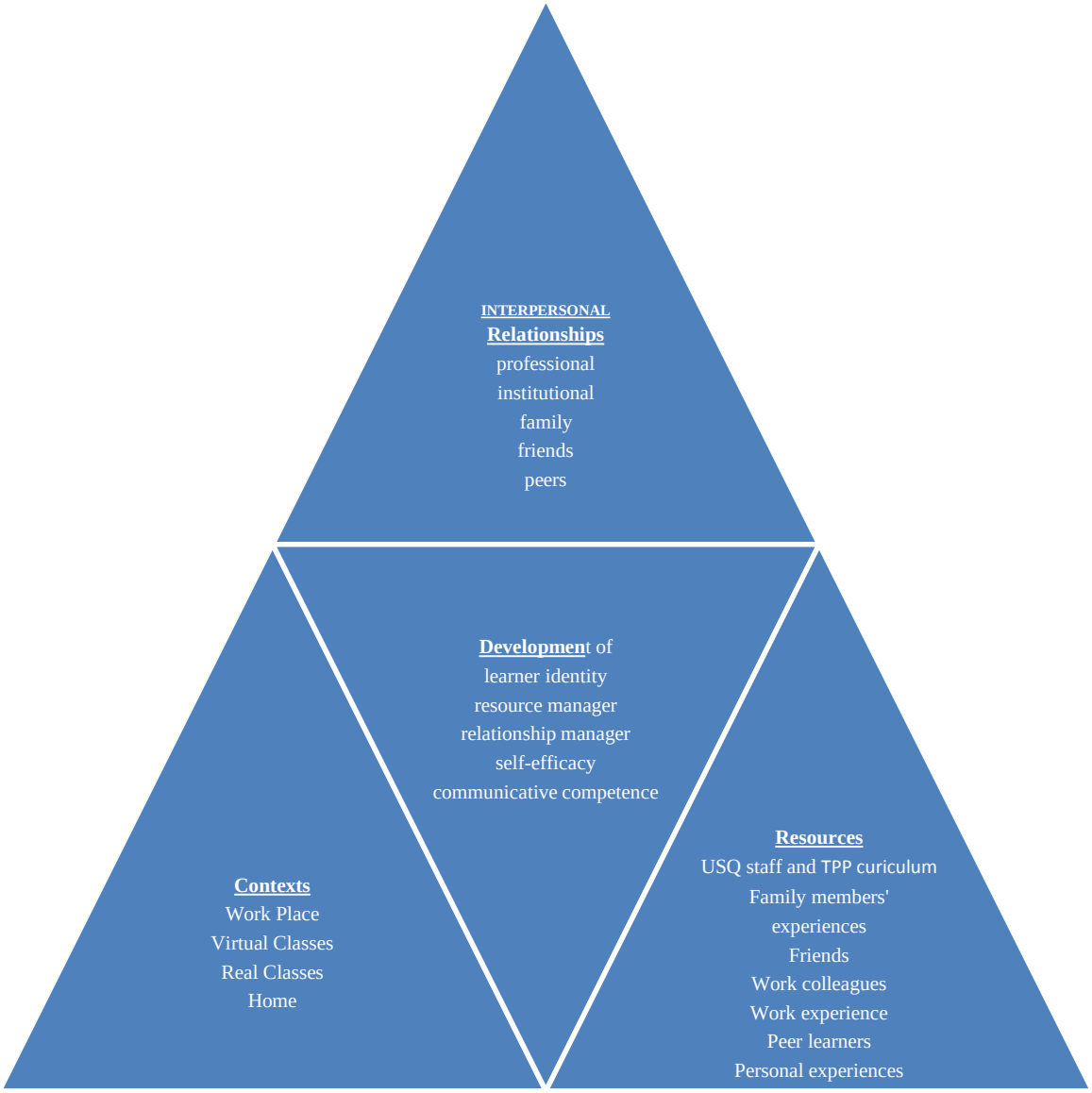


Figure 5.2 Martina's learning ecology

5.6 Summary of Chapter Findings

This chapter has discussed how TPP students are able to manage constraints and successfully persist with study within an ecological framework. Successful persistence is defined from a student perspective as attainment of learning goals. Cross-case analysis show that withdrawal from study and non-completion can be reconceptualised as strategic withdrawal when viewed from the student perspective. Some students re-evaluate goals during course progression and postpone study to a future date that matches with longer term plans. From the perspective of lifelong learning and widening participation, success means departing the program with a positive view of higher education and a disposition that tertiary study is a possible future option. This positive attitude towards higher education can be transferred to others within an individual's network of contacts, thus facilitating the widening participation initiative.

In a PLE, learning and development are distributed across different spaces and times and are the product of formal and informal learning in a variety of contexts. Findings from the study demonstrate examples of how formal and informal learning combine to facilitate persistence. Evidence based on student narratives of their study experience show that learning is dependent on successful management of resources and relationships situated in different contexts. Students who successfully persist with study face similar constraints to those who are not successful in attaining their personal learning goals. It has been shown that successful students are able to manage resources and relationships in a way that provides access to, and enables accumulation of, forms of social and cultural capital that facilitate the transition process. For many students studying online, the family home is 'the classroom' and the family context is pivotal to success for many students. This chapter has shown that sisters, brothers, parents, children and significant others have an important role in informal learning that complements the formal learning of the curriculum. Evidence presented in the chapter also shows that learning takes place in other spaces such as the work place and in the context of the teaching and learning community through peer to peer interaction, particularly the online social forum. Academic and administrative staff of the university are also a context in which learner development depends on good management of relationships and resources.

Thus successful persistence is largely predicated on the capacity to identify and utilise resources distributed across different spaces in the microsystem and mesosystem. Successful exploitation of resources requires management of social relationships and is dependent on development of a number of foundational (threshold) competencies. Competencies related to

communication and negotiation skills are crucial to regulation of the study environment. Management of relationships and utilisation of targeted resources enable accumulation of forms of capital that facilitate study. Finding time to study within a family context depends as much on a sense of empowerment and negotiation of social roles and responsibilities as it does on acquisition of time management skills. Learning what is expected in an assignment or the ability to code switch from a familiar to an academic variety of English ('academese') depend on establishing friendships or connecting with the social forum just as much as attending a 'lecture' or workshop. Thus, learning how to study and knowing what is expected at tertiary level depends on building interpersonal relationships and establishing strategic connections within the microsystem just as much as processing and reflecting on the content of the curriculum. The metaphor of a personal learning ecology captures the interactions and nexus between management of resources and relationships in different contexts that enable successful persistence with study.

Chapter 6 will outline the conclusions and recommendations developed by the study.

Chapter 6: Conclusions and Recommendations

6.1. Introduction

This chapter will present conclusions based on the findings of the study reported in Chapters 4 and 5. The chapter follows the structure of the relevant chapters with conclusions related to constraints (Chapter 4) appearing first followed by students' management of constraints and successful persistence (Chapter 5). The chapter will include a discussion of the theoretical implications of the findings as well as a section that considers the implications and recommendations for teaching and learning practice. Recommendations are made to mitigate structural constraints and also to improve existing practices based on the student experience of managing constraints discussed in chapter 5. Although the recommendations are made with reference to TPP, they are also considered relevant to other Enabling programs in Australia with open access entry policies. The limitations of the research will follow.

6.2. Constraints

This section will draw conclusions and make recommendations based on the findings of the study reported in chapter 4.

6.2.1. Structural constraints

The evidence presented in Chapters 4 and 5 demonstrates that many students from equity groups study under circumstances that are difficult. Students' reports of their experiences shows that finding time for study was a salient negative influence on satisfaction and course progression. Finding sufficient quality time for study was therefore an overarching constraint to emerge from analysis of students' assignments and interviews with the researcher. Time constraints were reported by both successful persistors and by those who withdrew from study or who failed to achieve their personal learning goals within the timeframe allowed by the university.

Chapter 4 showed that some TPP students work such long hours that they have little time for study after basic economic needs have been satisfied: 37% of external students and 13% of onsite students expect to spend more than thirty hours per week in fulfilment of paid employment commitments. A substantial proportion of the student population exceed the standard number of hours that constitute full time employment. While conclusions in the research literature are equivocal with regard to the effect of employment on study, it is generally agreed that working more than

twenty hours a week has a negative impact on study efforts (Coates 2011; James, Krause & Jennings 2010; Krause et al 2005; Moreau & Leathwood 2006). Evidence from interviews with participants further demonstrate that it is not just a matter of the number of hours spent in employment that impacts study but also the conditions and perceived willingness of the supervisor to negotiate working arrangements. This evidence suggests social relations can be a mediating factor in determining the influence of structural constraints.

Many students have both paid and unpaid work responsibilities. Unpaid work related to domestic and carer responsibilities and was found to be an additional structural constraint on time available for study. Quantitative findings from the study show that the majority of students spend at least twenty hours in unpaid work with a substantial portion of students spending more than forty hours per week on unpaid work. The portion of external students (21%) who expected to spend more than forty hours per week in unpaid work exceeded the fifteen percent (15%) of on campus students. Thus external students expect to spend more time than on campus students fulfilling responsibilities associated with unpaid work. If we take the findings in relation to paid and unpaid work together, it is evident time available for study is inequitably distributed across the TPP student cohort and some students, for example single working parents) face considerable structural constraints to successful persistence in the form of responsibilities for paid and unpaid work. Thus some TPP groups who cannot attend on campus support classes face substantial structural constraints to successful persistence.

On the other hand, findings show that students without substantial time commitments to paid and unpaid work also report time constraints related to not having sufficient time for study. It might be assumed that fewer structural constraints related to employment and family responsibilities would reduce time pressures associated with finding adequate time for study, yet in practice some students in this category also report constraints related to time available for study or dissatisfaction with what they are able to achieve within the timeframes set by USQ for completion. Thus, for some students the major constraint is the amount of time available for study while others are constrained by the way in which they utilize available time for study (see recommendation 1).

6.2.2. Individual agency

TPP students are also constrained by their educational history and background. The majority of TPP students have little formal educational experience beyond year 10 or 12 of high school. As a consequence these students are invariably less familiar with university expectations, or forms of cultural capital, that facilitate the transition to tertiary study. From the perspective of social reproduction theory, educational history and dispositions towards higher education are derivative of social position and therefore these reflect structural constraints. However, dispositions towards higher education are not completely determined by social position and socially disadvantaged individuals can and do accumulate forms of capital that enable them to succeed at university. Many students overcome social and educational disadvantage and succeed in pathway programs. Thus socially and educationally disadvantaged students are able to exercise a degree of agency or control over circumstances that constitute the social context of study. For example, only full time enrolment is permitted in TPP and there is no part time option. This is therefore a structural constraint since students have no control over the timeframe set by the university. On the other hand, how students utilise time for study is more a matter of individual agency. Thus constraints to persistence comprise both structural and agency factors.

Nevertheless TPP students tend to be relatively disadvantaged compared to more traditional university entrants because their educational histories make it more difficult for them to accumulate the necessary forms of capital in a short time period. Findings show that the educational and cultural histories of TPP students result in commencement of the program with low levels of the forms of capital that more traditional university entrants are assumed to have acquired as a result of primary and secondary socialisation. Thus newly commencing TPP students tend to be overconfident about meeting requirements but underprepared in the sense they also tend to adopt study approaches and practices that are not the most effective or efficient in terms of attainment of educational goals. Thus students experience dissatisfaction with their own level of performance compared to the expectations they have of themselves prior to commencement. They are able to match academic requirements, but not in the manner or to the degree they initially expected and this represents a constraint to successful persistence (see recommendation 2).

6.2.2.1. Unrealistic expectations

As foreshadowed in the previous section and confirmed by the quantitative findings from the survey, TPP students commence study with very high levels of confidence. They are confident of meeting deadlines, meeting academic standards, acquiring the necessary skills and coping with academic requirements. Students also begin the program with an expectation of the number of hours they will spend on study activities and believe this to be sufficient to achieve their own learning goals.

After a few weeks of course progression, however, these high levels of confidence are replaced by low self-efficacy and doubts about their capacity to cope with time constraints. Data based on student reflections on their TPP experience show that commencing TPP students have very little awareness of the demands of tertiary level education and therefore high confidence levels are a reflection of unrealistic expectations of what can be achieved in the time available.

Unrealistic expectations in relations to tertiary study reflect cultural factors rooted in educational history and secondary socialisation. Findings discussed in chapter 4 show the commonly reported experience of time constraints largely reflects a combination of structural constraints related to the number of hours spent in paid and unpaid work, unfamiliarity with tertiary study practices because of prior educational history, and the time constraints arising from the timeframes set by USQ for completion of TPP and compulsory assignments.

These unrealistic expectations of what students can achieve is sometimes compounded by false beliefs about the nature of tertiary learning. Failure to achieve high grades in assignments sometimes leads students to conclude they lack the cognitive ability or knowledge that they believe is required for successful tertiary study. Evidence presented in chapter 4 show false beliefs about learning and teaching at tertiary level can result in students adopting inefficient learning practices which further compound difficulties meeting academic requirements. To this extent TPP students mirror conclusions based on undergraduate research findings, that online distance education students face academic constraints because of limited experience of tertiary level study (Pierrakeas et al 2004).

Open Access programs such as TPP are populated by substantial numbers of students with minimal levels of educational attainment and experience. Many of the student cohort have little formal academic experience beyond year 10 or 12 of high school. Thus in terms of capital, commencing students have low levels of academic capital and successful persistence with study requires rapid accumulation of academic capital and 'know-how' within the time constraints determined by USQ (see recommendation 2).

6.2.3. Summary of structural and agency constraints

Viewed through the theoretical lens of Bourdieu's social reproduction theory, time constraints impacting on time available for study can be seen to be heavily influenced by socioeconomic and cultural capital. This theoretical perspective interprets time constraints as the interplay of factors related to social structure and individual agency. Structural constraints derive mainly from time spent on meeting basic needs and living requirements, principally paid work (employment) and unpaid work (domestic and carer responsibilities). Structural constraints determine the number of hours available for study after basic needs have been satisfied.

The time frame set by USQ can exacerbate students' experience of time constraints, constituting an additional structural constraint. It is a full time program with limited opportunity for students to negotiate time frames for completion of the program and there is no part time option. Matching the time frame for completion of TPP is a major constraints for many students. They are constrained by lack of socio-economic capital which restricts the time available for study. This constraint is compounded by low levels of academic and cultural capital which inhibits academic progress that fails to match students' own goals and expectations. Thus structural constraints leave little room for exercise of agency by TPP students.

Inequitable distribution of time for study is, therefore, a structural constraint from the perspective of social reproduction theory. Time available for study represents a resource that is accessible only after basic socio-economic conditions have been met. From this perspective, the way in which students prioritise home management over study management, for example, reflects the influence of the home habitus and although time spent on study may be regarded in terms of choice and prioritisation of

time, Bourdieu would argue the ‘choice’ is an illusion that reflects socio-economic position.

For some students there is little opportunity to exercise agency or self-regulate to free up time for study. The findings also show, however, that not all students face the constraint of spending long hours in paid and unpaid employment and therefore it would appear there is more opportunity for these students to exercise agency. Students who do not have substantial time commitments related to paid and unpaid work also experience time constraints related to successful persistence. In this context, however, time constraints arise because of the amount of time taken to meet university and personal expectations related to study goals. Thus the experience of time constraints may also reflects agency factors. While students have little control over the nature of constraints, they are able to exercise agency about how they manage them. In addition, the effectiveness and efficiency with which students go about the business of studying influences the experience of time constraints. Students’ study practices are, however, greatly influenced by academic experience that reflects educational history. One of the purposes of TPP and pathway programs is to increase the efficiency and effectiveness of study approaches but the evidence presented in chapter 4 shows that TPP students are constrained by lack of familiarity with academic practices. Lack of familiarity thus reflects educational history which also represents a structural constraints within Bourdieu’s framework since it reflects social position. Thus the study practices adopted by TPP students during course progression reflect both structural and agency constraints.

6.3. Lack of familiarity with academic practices

This section will discuss the constraints that arise from lack of familiarity with academic practices. The TPP student cohort largely consists of participants with little formal academic experience beyond year 10 or 12 of high school.

6.3.1. Academic literacies

In addition to constraints associated with realignment of study expectations with experienced reality, students are also constrained in their efforts to achieve learning goals because of their unfamiliarity with forms of discourse and literacies that partly constitute academic study. Everyday language practices appropriate in most of the situations within the student’s microsystem require considerable adjustment to match

the linguistic and discursive practices of academia. Previous research with undergraduate students has established that institutional expectations and demands are not always made explicit (Lawrence 2005) and universities often assume tertiary students have already accumulated enough cultural capital during primary and secondary socialisation to be communicatively competent in a university context (Devlin & MacKay 2014). The present study confirms that students in pathway programs are constrained by unfamiliarity with the discursive and literacy practices of academia. Students struggle to accumulate these forms of academic capital and report difficulties comprehending and applying academic literacies and discursive practices.

6.3.2. Online literacies

Online delivery is becoming increasingly important for USQ and many other tertiary institutions. For many students, studying TPP is the first experience of online learning. Familiarity with information technology and literacy practices should not be assumed by institutions but the present study has shown that some students commence study with very low levels of literacy in relation to use of computers and information technology and this is a constraint to achievement of student goals. The findings from the study show that more ICT support and guidance is required, especially in the early stages of TPP progression.

6.3.3. Support inadequacies

TPP students have to accumulate academic and cultural capital within a short time frame to meet academic requirements. The majority of students cannot achieve this without different forms of support from a variety of sources. The findings show that for many students the family is the main source of support. Unfortunately expectations of family support are not always met. The findings from the study show that in some cases significant others and family members have little experience of tertiary study and do not know how to support a TPP student. In addition, students themselves may be unable to identify how family members might help, and therefore the influence of the habitus may result in some students adopting sole responsibility for social roles without seeking help and support.

Tertiary study has a disruptive effect on family life and not all family members embrace the changes positively and some actively resist supporting students. In other

cases, family members may be willing to be supportive but some TPP students have limited capacity to assertively communicate learning needs as part of self-regulation. Learning how to seek help, in what form, when and from whom is just as much part of learning to become a tertiary student as writing a structured paragraph. In terms of support provided by the university, the study also shows that students are constrained by lack of communicative competence in a university context. Evidence from chapter 4 shows that sometimes staff and students do not share the same universes of discourse. Use of academic or bureaucratic English as a means of delivering support services in the form of feedback from assignments or help with administrative procedures act as compounding constraints for many transition students disadvantaged by prior educational history.

Students who are burdened with multiple responsibilities in addition to study commitments have little option but to educate others about the needs of being a tertiary student. Qualitative findings from the study show that social roles and responsibilities are deeply embedded in the social and cultural expectations of the family habitus and obtaining help may require challenging existing power relations within the family. 'Making' time for study often requires students to negotiate social roles and manage relationships in order to get necessary practical help with family responsibilities and therefore free time for study. Moral support and encouragement from family members is important but not guaranteed and is often insufficient if not accompanied by more practical forms of help.

This constraint is compounded by findings which show some students struggle to self-diagnose learning support needs. Others may recognise they need support but fail to articulate needs or educate others about how they might help the student to attain learning goals. The findings show that many students are constrained because they have little experience of negotiating social roles and fail to successfully communicate support needs to significant others. Many respondents in the study reported difficulties in asking for help from significant others in the microsystem and mesosystem. Constraints related to self-regulation and management of social relations extend beyond the family and affect students' capacity to educate others in the microsystem. Findings from the study show, for example, that having a network

of friends does not necessarily represent accumulation of social capital if the connection does not provide access to forms of cultural capital that can facilitate study. Friendship ties can be as binding as kinship ones and if friends and colleagues have little experience of tertiary study then the relationship can be a constraint to successful persistence.

Communicating support needs can be as simple as educating friends about the time constraints faced by tertiary students. Students are constrained if significant others do not empathise with the support needs of a tertiary student, often because the person has no personal experience of higher education. TPP students who struggle to develop empathy in significant others or who resist collaboration or communication with peers, risk becoming isolated. Isolation and experience of displacement that can result from trying 'to go it alone' are important negative influences on persistence, but the capacity to obtain necessary forms of support is constrained by low levels of interpersonal capital (see recommendations 6, 8 and 9).

6.3.4. Communication and interpersonal literacies

The study highlights the difficulties students experience in communicating with significant others, in their personal and academic lives, including with the university and with staff who sometimes have different universes of discourse. Use of academic or bureaucratic English as a means of delivering support services in the form of feedback from assignments or help with administrative procedures act as compounding constraints for many transition students disadvantaged by prior educational history. Use of formal and bureaucratic registers can inhibit students from seeking help or utilising resources that might otherwise facilitate persistence.

Thus constraints related to low levels of interpersonal capital are exacerbated by low levels of communication capital. These constraints make it more difficult for TPP students to seek and obtain forms of support in different contexts that could help sustain study efforts. The findings show that students have limited capacity to identify support needs or recognise the resources available that might satisfy those needs. The evidence also demonstrate that students' capacity to satisfy support needs is exacerbated by difficulties in communicating with significant others who are in a position to help. Students often fail to discuss working hours or conditions with employers or renegotiate social roles within the family. Some TPP students fail to

educate friends and social acquaintances about the demands of tertiary study and are reluctant to seek support from university sources. Others struggle to communicate support needs with academic and other university staff because of unfamiliarity with university discourse and literacy practices.

It was argued in chapter 4 that communicating academic support needs requires the capacity to be able to identify the appropriate person and know how to ask for help in an appropriate and timely manner. 'Appropriate' is determined by the norms of the speech community. The university may be regarded as an example of a speech community. Students on pathway programs are constrained by limited exposure to the norms of an academic speech community. Communication is further constrained if academic discourse is the source of difficulty or inhibits comprehension of attempts by university staff to provide clarification when students experience conceptual difficulties. Students have an entitlement to support from university staff but are constrained if they are not equipped to take advantage of this resource through unfamiliarity with discursive practices of the speech community.

While university staff are professionally employed to be proactive in anticipating the needs of students, and in providing support that can satisfy those needs, this is not always, or routinely, the case. In terms of communication, one of the needs of TPP students is to receive information that is in plain English, but the findings show students are constrained by staffs' over use of academic, bureaucratic or 'official' language that effectively disadvantages those less familiar with these literacies. Similarly, written feedback from academics intended to facilitate comprehension and learning can have the opposite effect if information is encoded in 'academic' rather than 'plain' English. For example, there is little point informing a student they have failed to develop an 'argument' if the student has not understood the concept of argument in the first place. Communication difficulties therefore constitute a significant constraint to successful persistence with study.

Many TPP students have low levels of forms of interpersonal and communication capital that constrain access to important sources of support. In particular, TPP students struggle with discursive and literacy practices found at university. It is these literacy and discursive practices that Bourdieu (1977) argues are demanded of all university students but not always made explicit by the university (Lawrence 2005)

and as this study shows, are not comprehensively taught as part of the TPP curriculum. Social reproduction theory depicts forms of language and literacies used in universities as the prime example of cultural practices that are effectively exclusive for those social groups whose primary and secondary socialisation has not included development of communicative competence in an academic setting. (See recommendations 4, 5 and 8).

6.3.5. Constraints: summary

Many of the 'academic' constraints faced by TPP students are rooted in a cultural inheritance that is different from traditional university entrants who are relatively advantaged by a preparatory period over a much longer time span and more targeted in terms of accumulation of forms of capital that are necessary for tertiary study. Thus explanatory account of the findings are in accordance with social reproduction theory which argues that non-traditional students will experience a sense of alienation from the university because of the incongruence between the culture of the habitus and that of the university.

The findings partially support models of attrition based on social and academic integration theory. Kember's derivative model stipulates failure to integrate study needs with work and family responsibilities will constrain persistence with study and this prediction was matched by the reported experience of some students. However Kember's model suggests students will experience difficulties meeting academic standards because of adoption of ineffective study habits, such as studying late at night when children have gone to bed. The findings of the present study show however, that a large cohort of students experience responsibility conflict and many students adopt study habits that are not ideal from a teaching and learning perspective, but they are nevertheless able to make satisfactory progress in terms of assignment grades and measures of program progression. Indeed, the academic record of most students who do not complete the program reveals 'non-completers' manage to achieve satisfactory or good grades in academic assignments up until the point of 'departure'. Furthermore, students who fail to keep pace with the time lines set for course progression, or fail to complete the program because they do not submit the required number of assignments, do not demonstrate lack of knowledge or

awareness of TPP curriculum materials related to time and study management. Successful completion of these modules, reflected in grades awarded for relevant assignments, is evidence that constraints to successful persistence on TPP reflect cultural rather than academic influences.

Social and reproduction theory offers a useful framework for discussion of constraints to persistence in TPP because it focusses on the important role of educational history, cultural inheritance, and personal circumstances that are derived from the social and economic position of the TPP student. As was pointed out previously, TPP students are characterised by lack of success as measured by attainment of formal educational qualifications at secondary school level. As a result many have a disposition towards tertiary study that makes them doubtful and unsure whether university is for them. TPP is an opportunity for these students to find out if they are suited to tertiary study and to find out if it is a viable future option. Findings from the study confirm that many of the social, academic and cultural constraints to successful persistence are rooted in the educational histories of participants which results in students commencing TPP with little knowledge of the realities of tertiary study and little familiarisation with tertiary requirements. The socioeconomic position of many TPP students also results in constraints related to time available for study because of long hours spent in paid and unpaid work. Thus social reproduction theory is able to explain the nature of constraints and the extent of the challenge TPP students face in successfully persisting with study. While the theory clearly explains the nature of constraints and challenges to persistence, it is not so able to explain how successful students are able to manage constraints and successfully persist with study.

6.4. Persisting with study

This section draws conclusions about TPP students' attempts to manage constraints and persist with study. Recommendations which follow are informed by the way successful students managed constraints, as reported in chapter 5 of this study.

6.4.1. Managing constraints through strategic withdrawal

Findings from the study demonstrate that the meaning of successful persistence from the student perspective can change during program progression and does not always match university definitions of success or the timeframes for achieving it. Success

for some students does not require completion of TPP with a passing grade. Some students benefit from the TPP study experience by recognizing that tertiary study is not for them, not necessarily because they are dissatisfied with the experience but because of re-evaluation of goals as a result of the experience of TPP study. Other students maintain an ultimate goal of progression to undergraduate study but the time frame for achievement of this goal is revised as a result of the TPP experience. Reflection on the learning experience results in some students postponing TPP until a future date when they benefit from their previous experience of study by adopting different strategies for success. Students who 'withdraw' with the intention of re-enrolling the following semester is an example of strategic withdrawal. That strategic withdrawal can be a successful way of managing constraints is supported by research in other pathway programs (Hodges 2013; Muldoon & Wijeyewardene 2013). Further research is recommended to investigate strategic withdrawal as a way of managing constraints. (See recommendations for further research, section 6.5).

6.4.2. Accessing support from the microsystem

Successful students manage constraints by accessing a variety of resources distributed throughout the microsystem that can support persistence with study. The family context is an important source of support and the findings show different types of support are provided by a variety of family members. Family members support TPP students by easing structural constraints associated with unpaid work. Practical help with childcare or domestic responsibilities, for example, can considerably ease the experience of time pressures by allowing the student to spend time on study which would otherwise be spent fulfilling non-study commitments and social responsibilities.

Family members help students to manage time by providing co-curricular support. For example, they provided assistance in the form of proofreading and discussion of assignment requirements, clarification of academic concepts, or assistance in becoming familiar with academic literacies. Family members provided a form of mentoring that resulted in students being able to study more effectively and efficiently, thus enabling students to meet TPP timeframes which, as the previous chapter highlighted, is a major constraint to persistence in TPP. Some of the forms of support illustrated in the findings could not be provided by official university

support systems, such as the example of help in managing procrastination, another major constraint commonly reported by TPP students. In this case, a 'significant other' reportedly removed distractions and 'locked' the student in the room until she had completed her study task. Not only was this a form of support that could not be provided by the university support system, but was a practical demonstration of how to apply time and study management knowledge gained from the curriculum to the situational context of study. Thus, findings not only demonstrated the different types of support that enabled students to manage constraints, but the different kinship ties involved. TPP students reported receiving help from not only siblings, relatives, parents and grandparents but also from spouses, children and significant others (see recommendations 2, 3, 6 and 10).

6.4.3. Managing resources and relationships within the microsystem

The family context is an important resource that some students were able to access to manage constraints but this source of support depends on students being able to educate other family members about support needs and other members of the family being in a position to help. This is not always the case and some TPP students were forced to look beyond the family context for support with study. In fact, looking beyond the family context for support was an effective strategy adopted by successful students to manage a range of constraints. For example, some students were able to manage constraints associated with paid work by negotiating times and conditions of employment to better suit their study schedule. This not only freed up time for study but enabled students to attend support classes on campus or otherwise take advantage of onsite university support. In addition, some students were able to access academic support from work colleagues in the form of help with assignment editing and presentation, comprehension of mathematical concepts and deconstructing university instructions and forms of literacy that were unfamiliar to many TPP students.

The types of support provided by the family and work colleagues demonstrate that forms of social and cultural capital that can facilitate tertiary study are available from different parts of the microsystem. The impact of study on the lives of TPP students and their families is similar to that reported by O'Shea (2007, 2014), O'Shea and Stone (2011) and Stone (2008) in relation to non-traditional first year undergraduate

students who are first in family to study at university. While tertiary study presents a challenge for many non-traditional students and their families, the findings illustrate that studying on the TPP pathway program for many students is a positive developmental process for the whole family unit. Many TPP students successfully persist with study because they are able to manage the disruption caused to normal family routines in such a way that they transform a potential constraint into a resource that facilitates persistence. Actively engaging other family members in the study process not only provides access to support and frees up valuable time for study, but also appears to strengthen existing social ties, thus ensuring future support will be available.

Some family members or significant others who provided support had the benefit of personal experience of higher education but many had not. Most of the literature that discusses the role of family support in tertiary persistence concentrate on the role of parents in influencing children to participate in higher education and conclude that parental attempts to support children are inhibited if they do not have experience of tertiary education themselves (Bryan & Simmons 2009; Collier & Morgan 2008; Lehmann 2009). These researchers argue that 'working class' students are less likely to receive social support from family and friends for the same reason. The findings from this study demonstrate that in some cases this is reality but there are also many examples where family members can provide necessary support. In the case of TPP, however, family support is less likely to come from parents and more likely to be provided by children, siblings or spouses.

Thus from a theoretical perspective, the findings show that TPP family members and significant others in the microsystem are able to provide access to forms of social and cultural capital that facilitate transition to tertiary education. These findings are not in accordance with social reproduction theory. This theory explains why constraints to persistence reflect socio-economic position in society and are rooted in the home habitus and educational histories of non-traditional students. Historically, preparation for university has involved years of acculturation through secondary socialisation in schools that specialize in providing access to forms of cultural capital that are valued in elite institutions such as universities. Arguably, universities are less 'elite' nowadays compared to the era in which Bourdieu carried out his field research and the forms of cultural capital that are useful in university preparation are now

more widely distributed in the community. Thus social and cultural capital that can facilitate successful persistence is no longer haute culture that is the preserve of elite groups but is more utilitarian and distributed throughout the community. That pathway students are able to accumulate social and cultural capital through existing social and kinship ties that facilitate tertiary study is not the social capital of Bourdieu, but is more akin to the concept of social capital developed by Coleman (1990). Coleman (1990) construed the concept of social capital as a community resource that enables individuals to pursue their own interest through cooperative structures. According to Coleman (1990) social capital is available for all groups and not the preserve of the social elite or groups who combine to preserve the status quo. It is a resource that can be used to reduce educational disadvantage and the bulk of Coleman's empirical research was conducted in relation to secondary schools where social capital was identified as a positive influence on retention rates in Catholic and other religious schools in the United States (see recommendations 6-10).

6.4.4. Managing university resources and relationships

Some TPP students managed constraints by accessing support from the teaching and learning community. Students reported utilizing a range of resources in the teaching and learning community to facilitate study. Some resources such as workshops on academic writing or student meet ups are part of the university support system designed to support pathway students. Engagement in collaborative learning with peers and accessing information and help from the social forum were frequently reported as strategies adopted to manage constraints and facilitate successful persistence. Resources were used to become more familiar with university practices, share information about program content, give and receive advisement on assignment completion, gain clarification about academic concepts, and share experiences of study. The social forum, in particular, was frequently cited as a source of emotional support with empathic exchanges between students facilitating the development of resilience and fostering a connectedness that prevented a sense of isolation.

One of the features of gaining support in the university context that was highlighted was the importance of communicating effectively. Obtaining support in the family context is also predicated on effectively communicating learner needs to significant others but gaining support in the university requires familiarity with the discursive

practices that partly constitute university culture. Different speech communities coexist in higher education and pathway students need to develop competencies in communicating with these different speech communities. For example, obtaining support from a tutor on academic matters requires a different form of communicative competence from collaboration with peers.

The findings from chapter 4 emphasise that many TPP students are constrained by low levels of interpersonal and communication capital during the first few weeks of tertiary study. Gradually, however, successful students are able to develop communicative competence and become more proactive and assertive in the way they communicate their support needs to others. Students managed constraints by developing a network of contacts and resources so that they can match available resources with perceived support needs. Thus successful students were able to accumulate social and cultural capital through development of a support network that spanned the different contexts of learning. Some students were able to garner different types of support from family members, work colleagues, university academic and professional staff, peer learners and other resources within the teaching and learning community. Accessing and benefiting from support resources, however, is predicated on having appropriate interpersonal and communication skills.

One of the important types of support garnered from different sources was familiarization with university discursive and literacy practices. Low levels of cultural capital related to language and literacy was identified in chapter 4 as a constraint to persistence. One of the three modules that constitute the TPP curriculum teaches communication skills for university and therefore this source of support in developing communicative competence is an important resource for familiarising TPP students with academic discourse and literacy practices. Some students, however, required additional support in becoming familiar with academic literacies, and some students reported a reluctance to engage with formal support mechanisms and chose the support of family members, work colleagues or, more commonly, peers to gain familiarization with digital skills or understanding assignment instructions or feedback. Although some students accessed official university support systems for this purpose, support in learning how to learn in a university context was more often provided by significant others rather than professional support staff.

It is important that students access support from a variety of sources throughout the microsystem and mesosystem. The national study to identify strategies to improve student retention in university-based enabling programs in Australia (Hodges et al 2013) identified low uptake of student support services as a major contributing factor to the high attrition rates in pathway programs. Indeed the study recommended an increase in the number of professional support staff and urged universities to adopt measures that would encourage students to engage with university support systems more frequently. The present study did not seek to quantitatively measure how many students utilised professional university support but it was evident that the majority of students accessed a variety of 'other' resources that would facilitate study. Some students did report heavy reliance on professional help and were generally very appreciative of the support received but the findings of the study do suggest reasons why many students sought help from other parts of the microsystem rather than rely on professional services.

Other parts of the microsystem were preferred to professional services because firstly, obtaining family or peer support was seen as an investment in social capital that strengthened existing social ties and helped foster new connections that could facilitate future learning. Secondly, obtaining support from different parts of the microsystem was a means of involving significant others in helping students attain their ultimate goals. Bourdieu discusses how mastery in any field requires players to develop a 'feel' for the game. The findings of this study suggest that obtaining support from significant others within the microsystem not only develops a 'feel' for the academic game, but also brings others into the game. Thus 'outsiders' are included in the transition process that might otherwise be excluded. Thirdly, students found it easier to articulate and communicate their learning needs in an informal setting using everyday forms of language with which they were already familiar (see recommendation 5).

This section argues that TPP students manage constraints by accumulating social and cultural capital through developing a network of resources and relationships that facilitate successful persistence with study. Management of constraints also requires intrapersonal development and the findings of the study illustrate a number of key skills and competencies that enable TPP students to succeed. The next section discusses these personal capacities.

6.4.5. Developing persistence capabilities

This section will discuss how students managed constraints and developed persistence capabilities by development of a support network, engagement with reflective practice and personalisation of the learning process through development of a personal learning ecology.

6.4.5.1. Developing a support network

Accessing a variety of resources and developing a network of contacts who can help with study is an important part of learning how to persist at tertiary level. A corollary is that ignoring or underutilization of university support mechanisms is not necessarily an indication that these mechanisms are faulty or not appreciated by students. The findings suggest that developing a support network is crucial to management of constraints. The transition to higher education is, therefore, as much a social and cultural journey as an academic one.

Learning how to better manage existing social relations and development of competences that foster development of new connections is therefore just as important to persistence with study as learning how to write an academic essay. The importance of obtaining support from the microsystem was clearly demonstrated in the contrasting case studies analysed in chapter 5. The student who failed to attain his personal learning goals (Anthony) was over reliant on moral support from his wife and failed to obtain support from other parts of the microsystem. His support needs were not academic in the sense he reported no difficulties in meeting academic requirements in assignments but study was essentially an isolating experience and he was unable to 'fit in'. By contrast, Linda found it more of a challenge to meet academic requirements but was able to successfully persist because she accessed a variety of formal and informal support resources.

Social capital plays a crucial role in promoting academic persistence in adult learners not only because it prevents isolation and helps new students to 'fit in', but because it provides access to forms of cultural capital that facilitate success. Field (2008) argues that the relationship between social capital and educational attainment is one of the most robust in social science research although he also points out the mechanisms involved are not fully understood. Field is referring to the fact that little is known about how connections and student networks affect access to (tertiary) learning.

The findings in this study provide some insight into the mechanisms by which social capital is able to facilitate persistence in pathway programs such as TPP. Field (2005) confirms the role of social capital in promoting academic persistence in adult learners. In fact Field argues that social capital can substitute for formal learning and that adult learners can acquire relevant skills from family members, co-workers, neighbours, and others in the microsystem. Findings from the present study suggest that, in the case of TPP, informal learning through connections to support resources within the microsystem can supplement and compliment formal learning from the curriculum rather than substitute for it. (Recommendation 5, 7, 8 and 9).

6.4.5.2. Developing reflective practice

TTP students testified that reflective study practice was an important competence that enabled them to manage constraints associated with lack of experience of formal academic study at time of commencement. The findings show that some students realised during course progression that circumstances were not favourable for satisfactory progress, perhaps because of a family illness or new addition to the family or other changes that impacted on the time available for study. Under these circumstances some students postponed study until circumstances are more favourable. Some students, including those who have previous experience of TPP, recognise at some point that they have adopted an ineffective study approach or underestimated tertiary requirements or have fallen behind the schedule for submission of assignments. Others recognised that tertiary study is an interdependent process and engage more with the teaching and learning community and also become more proactive in seeking out resources and relationships that can facilitate study. The findings show how successful persistence requires not only adaptation to changes in circumstances but the capacity to self-regulate and take control of management of change.

The findings also show that many students were able to adapt curriculum knowledge to their individual situational context. For example, one student ‘taught’ a sibling as a way of testing her knowledge and understanding, a strategy she attributed to program materials on learning styles. Others benefited from consulting with study journals and study schedules constructed to meet TPP academic requirements through recognition of strengths and weaknesses of individual study plans and approaches.

Successful students were also able to manage personal relations and recognize that not all sources of support were suited to their individual learning style. Under these circumstances, students managed constraints by identifying alternative resources that could satisfy their support needs, such as finding a 'study buddy' or forming a new study group. The capacity to self-regulate required students to effectively manage changes to circumstances and relationships that developed resilience and at the same time reduced the stress which, at the beginning of the study process, threatened to overwhelm them.

6.4.5.3. Developing a personal learning ecology

The process of managing constraints and successfully persisting with study is best conceptualised as development of a personal learning ecology. Intrapersonal development requires management of resources and relationships in different contexts. Successful persistors are able to manage relationships within the family, with friends and significant others in a way that facilitates study. They become more assertive in educating others about study needs and how they can be satisfied and communicate more effectively with family, friends, employers, tutors and university staff about how they might help the student to achieve personal goals. They are able to engage significant others and garner forms of support so that attainment of the individual's study goals becomes an interdependent process with different participants fulfilling complementary roles. Student progression entails management of a wider range and variety of resources and relationships. Development of a personal learning ecology places the learner firmly at the centre of the learning process. Successful learning requires the individual to manage people and resources so they become active participants in helping individual TPP students to attain personal goals. To paraphrase Jackson (2014), development of a TPP student's learning ecology is the processes he or she creates in particular contexts for particular purposes that provides the student with opportunities, relationships and resources for learning, development and goal achievement. (See recommendations 6, 9 and 10).

6.5. Recommendations

This section will discuss the implications for teaching and learning that arise from the conclusions. A link to recommendations was included at the end of each conclusion to enable the reader to identify the rationale for each recommendation.

This section will include further justification of the recommendations, all of which arise from conclusions to the findings of the study presented in chapters 4 and 5. This thesis has argued that TPP students successfully persist with study when they manage constraints and build personal capacity by development of a learning ecology. Recommendations which follow are based on the conclusions and findings from the study and are based on measures that can be taken by USQ to facilitate students to attain their personal learning goals by building a personal learning ecology (PLE).

Recommendation 1: that the USQ TTPP program introduce a part-time enrolment option.

Socioeconomic and cultural constraints result in the student perception of insufficient time for study and are difficult challenges to manage because of the influence of structural factors. There is very little that students or the university can do when socio-economic conditions determine that students must spend long hours in paid and unpaid work to meet basic living requirements of self and family. The time frame for completion of TPP is short and students who have to spend long hours in paid or unpaid work are disadvantaged in comparison with their peers but especially relative to traditional entrant full time students without analogous social responsibilities. The most obvious change to the status quo that would increase the time available for study is the introduction of a part-time option for TPP.

Implementation of this recommendation will not automatically improve rates of retention because there are many interconnecting factors that contribute to non-completion. However, given the fact that most of the undergraduate programs in USQ offer a part-time enrolment option, it is somewhat incongruous that a pathway program should not provide the same flexibility. It is important to underline, however, that the evidence from the study shows that some students are able to manage multi-constraints and attain their goal. One of the aims of the present study is to examine how students are able to successfully persist with study. The assumption is that shared knowledge of how successful students persist will inform development of the curriculum and pedagogical practice so that all students can benefit from the experience of peers who have overcome challenging circumstances. On the other hand, teaching practice must also be informed by findings that some students are not able to overcome constraints. Lack of flexibility in time requirements set by the

University for TPP completion further disadvantages some groups who already face multiple challenges in their attempts to attain learning goals. For example, the findings show that external students, who do not have the opportunity to attend onsite support classes, tend to spend more time in paid and unpaid work relative to their on campus (ONC) enrolled peers. These students often cannot attend onsite support classes because they live too far from campus and therefore the option to enrol part-time would be a positive step in reducing one of the disadvantages faced by students.

Recommendation 2: that USQ provide additional targeted information to address the needs of TPP students prior to enrolment.

Successful persistence with TPP study is constrained by students' educational history. The constraints experienced by TPP students are not atypical of those faced by their peers in analogous pathway programs or by undergraduate students who are disadvantaged because of their educational background. It is worthwhile to briefly summarise some of those constraints which have a degree of commonality and therefore predictability. We know from the findings of the present study that students are constrained because they have limited prior information about the realities of tertiary study. This is a considerable constraint because the findings show that unfamiliarity with the university results in overconfidence and unrealistic expectations of what can be achieved given the situational context of study. Furthermore, constraints related to limited experience of education prior to enrolment can also result in false beliefs about the nature of tertiary study and in particular the amount of study required to meet academic expectations. Findings from this study support the findings from other research investigating constraints faced by first year undergraduates who are first in family to attend university. O'Shea, May and Stone (2015, p6) refer to the 'range of myths that exist in relation to university'. This constraint is further compounded by limited practical knowledge of efficient and effective study practices that facilitate achievement of personal learning goals at tertiary level. In terms of everyday language, students need to 'hit the ground running' in TPP and therefore need to be better informed about the realities of tertiary study prior to enrolment.

An example of the kind of proactive approach that would result in more effective communication between the university and future students is provided by the

University of South Australia. A recent initiative in South Australia arising out of an OLT funded research project (Crisp et al, in press) has resulted in a number of practical measures to increase awareness of academic demands of tertiary study. This information is communicated to prospective students in schools to improve future students' knowledge of the demands of tertiary information. The instructional information has a particular focus on time constraints relative to the study requirements necessary to meet university standards. It is anticipated that this knowledge will benefit future students but also better inform teachers responsible for tertiary preparation in schools. The fact that such a project was deemed necessary, and the nature of the findings support the claims made in the present study that unrealistic expectations, and false beliefs about the nature of tertiary study prior to enrolment, are constraints to success once tertiary study begins. A similar project would benefit tertiary preparation outside the school context. Although there is a TPP orientation program in place, the fact that so many TPP students commence study with false expectations of what they can achieve within the allocated time frames suggests improved preparation practices prior to enrolment would facilitate success with program progression and might also improve retention rates.

Recommendation 3: USQ TPP program provide information materials for partners and families of students to familiarise them with university expectations and knowledge of how TPP study impacts family routines.

The evidence from the present study shows that brothers, sisters, grandparents, partners, spouses and significant others can be resources that provide access to forms of capital that facilitate persistence with study. For many students, the experience of studying TPP is a 'family affair', and the findings of the study show that practical, emotional, and academic support is available to manage constraints that result in stress and a negative experience of study. Support from the family is not an entitlement, however, and students need to have the competencies to educate family members about ways they can support study efforts, especially when significant others do not have experience of tertiary study. Information materials should be developed that specifically target family members and significant others in the microsystem who, according to the findings of the study, are in a position to facilitate the transition to university process. In addition to information materials targeted at families, early TPP assignments could be designed that would involve families or

significant others in the study process and could help family members recognise ways in which they might support a TPP student's transition to tertiary study.

There is a wealth of information available on the transition experience, some of which is suitable for use in academic assignments. An important aspect of the TPP and pathway programs is familiarisation with academic literacies and conventions associated with academic and formal writing. Information on students' experiences and the transition to university process from sources such as www.firstinfamily.com.au (O'Shea, May and Stone 2015) could be utilised by pathway students in assignments where the focus is on development of threshold competencies in academic literacies rather than discipline or content knowledge. Students could compare personal experiences with published research on the transition process while learning how to analyse, synthesise and evaluate source material. This may help familiarise students with academic discourse without the burden of learning specific discipline knowledge and could also be effective in involving significant others in the learning process.

Recommendation 4: That TPP familiarise students with a broader range of university literacies

Another major constraint identified in the present study results from unfamiliarity with the forms of literacy found at tertiary level. Students need to be familiar with a range of literacies (Lawrence 2005). Digital literacy forms have become more important recently following the USQ decision to have more online instruction. Findings show that some students are not familiar with even the basics of information technology or digital literacies, yet familiarity is assumed and is not part of the formal curriculum. Instruction and familiarisation is available as part of onsite orientation but only a minority of students are able to benefit and again students who live too far from a campus are further disadvantaged because of their geographical location. Thus all students must have the opportunity to become familiar with the basics of information technology and digital literacies during orientation or as soon as is practically possible thereafter.

Recommendation 5: That TPP develop pedagogies to enhance students' communicative competences

Constraints arising from unfamiliarity with the range of literacies found at university is compounded by the requirement that students become communicatively competent in the variety of English generally known as academic English. Communicative competence is not acquired overnight and mastery of specialized registers can take many years of reflective practice. TPP students do not have years and must meet standards set in the communication modules of TPP in a matter of weeks. It is recognized that becoming communicatively competent in professional registers is a necessary and important part of learning how to learn in any domain, including academia. It is therefore appropriate that much of the focus in communication modules of the curriculum is on academic forms of communication such as writing reports and essays. It is also recognised that at some point in a student's university career it is necessary to be able to analyse, synthesise and evaluate information from professional journals. This is a necessary component of mastery that must be demonstrated as a graduate attribute. Specialized forms of language, and mastery of academic English, however, are of less utilitarian value for students who are on transition to undergraduate programs. Indeed, evidence from the present study shows that many commencing students have very low levels of linguistic and literacy capital. Students struggle to meet academic literacy requirements because they have limited experience and low familiarity with formal written English. Thus the findings of the study show that TPP students are constrained by low levels of communication capital and USQ can help students manage this constraint by providing access to a broader range of university literacies and communicative practices besides a narrow focus on academic reading and writing. Students need to be supported in efforts to attain threshold competencies in a range of literacy and discursive practices that enable them to build personal capacity and develop a PLE.

Recommendation 6: USQ assist TPP students to identify, access and exploit resources and relationships that enable them to build a PLE.

It has been argued here that successful persistence is facilitated when students develop a PLE. To do so, they need to have the capacity to identify, access and exploit a range of resources within the microsystem and the teaching and learning community. It has also been argued that development of a PLE is predicated on successful management of existing social relationships as well as development of new ones. Resources and relationships exist in different contexts and each context

requires a different form of communicative competence. Pedagogy in pathway programs must facilitate students in building personal capacity by scaffolding activities and instruction that specifically target necessary communication and interpersonal skills required to build a PLE. The findings show that peers are an important resource for some students but pedagogy to facilitate engagement and exploitation of this resource need to be developed.

Recommendation 7: TPP develop pedagogical materials that provide instruction and assessment of competencies related to collaborative learning.

Finding from this study confirm that engagement with peers, particularly through the social forum, was an important source of support that enabled accumulation of social and cultural capital that facilitated successful persistence with study. It was also noted that not all students were active participants but even a passive social presence on the forum provided support and encouragement. It was also noted that participation in collaborative learning is an important part of becoming a tertiary student. There is a growing demand from stakeholders that academic studies be more oriented to the workplace and tertiary teaching should develop the capacity to solve 'real-world' problems. The capacity to develop a network of support and engage in collaborate tasks is a graduate attribute that is sought after by employers. The capacity to engage in collaborative work projects, recognize developmental needs in others and engage in activities which benefit the development of others are competences that can be developed in pathway programs that will facilitate both academic and career development. Although peer collaboration is encouraged in TPP it is not actually an academic requirement and it is therefore recommended that future instruction materials and assignments tasks include collaborative learning.

Recommendation 8: TPP provide instruction and engage students in collaborative work to identify support resources.

Development of a learning ecology requires connections to different resources within the ecosystem. Many of these resources are distributed in spaces throughout the teaching and learning community. Successful students in the study reported the benefits of participation in a number of co-curricular activities such as peer meet-ups, study groups, and peer friendships usually developed onsite. Students who are able to develop these connections and relationships online, however, are further advantaged in comparison with onsite students since universities are becoming more reliant on

online delivery. Very few students reported awareness or use of resources available through the internet yet there is an abundance of information and academic support available from a variety of sites. Students could be facilitated in identifying and exploiting online resources to satisfy individual learning needs.

The TPP curriculum needs to include teaching materials that will provide instruction and develop interpersonal and communication competences that will enable students to garner support from significant others, especially in the family context. The findings clearly show that some students are encouraged by information they learn from peers on the social forum, but not all students have an active presence on this site. At present students are required to report on constraints to study from their personal experience and are required to respond to the constraint by identification of strategies for managing perceived difficulties. Students would benefit further from this exercise if they are required to collaborate and collect data on the constraints experienced by peers and use this information to write a short report on how TPP students manage constraints arising in the family context. This learning activity would provide opportunity to practise a number of important academic skills using information that would be salient and meaningful to TPP participants.

Recommendation 9: TPP facilitate personalisation of the learning process.

Seeking help and guidance from members of the teaching and learning community is an important competence in development of a PLE. Nevertheless, many successful persistors acknowledged resistance to adoption of this form of help seeking behaviour. Failure to seek help from tutors or the USQ support system, however, represents a significant constraint to successful persistence in the long term. It is true that many TPP students managed constraints by identifying alternative resources from different parts of the microsystem that could provide support. Thus some students engaged family members or work colleagues to help with assignment completion or interpretation of feedback or other difficulties related to matching academic expectations. The dialogical process of negotiating meaning surrounding assignment instruction and feedback has been reported by students in this study as a beneficial form of 'scaffolding' that helps development of communicative competence in an academic context, particularly since it involves both parties code switching from the informal variety of English used in most contexts in the

microsystem to the more formal academic mode dominant in the academic context. Thus many successful persistors were able to combine informal and formal learning in personalised ways that facilitated study. Many of the students who did not persist with study, however, failed to identify suitable sources of support, and were unable to overcome difficulties in communicating with academic staff about support needs. In the longer term students will not be able to succeed with advanced tertiary study without engaging with academics and support staff. Seeking support from relevant staff is therefore a threshold competence for pathway students. Currently there are two main constraints to development of such competence. The first is the academic language used to provide instruction and feedback for assignments. Student comprehension would be facilitated if a policy of plain English use were implemented in dialogical relations between staff and students. Secondly, the current TPP practice of random allocation of assignments to markers inhibits personalisation of learning. Students do not have the same marker for consecutive assignments and while students can contact markers indirectly for further information regarding assignment feedback, there is no personal tutor responsible for discussing or advising on academic progress. This results in an impersonal system that inhibits a sense of belonging and 'fitting in' at university. Thus individual tutors should be assigned responsibility for particular students for the purpose of advisement on progress and other academic matters.

Recommendation 10: The USQ TPP program provide assistance to enable students to access resources from different parts of the microsystem.

Students in the study identified work colleagues and other social relations associated with the employment context as sources of capital. Support with discipline knowledge, proofreading assignments, help with basic grammar and sentence structure, and advisement on formal writing style, are examples provided by research participants of how work colleagues supported the learning of TPP students. Development of these competencies are a prerequisite for matching academic standards and utilization of resources from the employment context complemented, supplemented and occasionally substituted for formal learning through the curriculum. Equally valuable as instrumental in enabling persistence with study was the student's capacity to negotiate working hours and conditions to allow a more concentrated focus on study activities. Time constraints resulting in insufficient time

for study was the most frequently cited reason for discontinuation of study but also the superordinate constraint reported by those who successfully persisted. Thus, the capacity to 'make' time for study by gaining support from others is a valuable life skill utilised by some TPP students to facilitate study.

Summary of Recommendations

1. The USQ TPP program introduce a part-time enrolment option.

2. USQ provide additional targeted information to address the needs of TPP students prior to enrolment.

3. USQ TPP program provide information materials for partners and families of students to familiarise them with university expectations and knowledge of how TPP study impacts family routines.

4. TPP familiarise students with a broader range of university literacies

5. TPP develop pedagogies to enhance students' communicative competences

6. USQ assist TPP students to identify, access and exploit resources and relationships that enable them to build a Personal Learning Ecology.

7. TPP develop pedagogical materials that provide instruction and assessment of competencies related to collaborative learning.

8. TPP provide instruction and engage students in collaborative work to identify support resources.

9. TPP facilitate personalisation of the learning process

10. The USQ TPP program provide assistance to enable students to access resources from different parts of the microsystem

6.6. Contribution and Further Research

This study has shown the value of researching the student experience in depth. The comprehensive survey by Hodges et al (2013) provided useful descriptive information about the factors that contribute to retention and persistence in pathway programs. One of the main findings was that students perceived time constraints as a barrier to participation in higher education. The present study has confirmed this finding and produced a more detailed and nuanced account of the student experience of time constraints and the consequential impact on persistence with study.

Interpretation of the student experience through the lens of social reproduction theory enables time constraints to be viewed as the interaction of structural and agency factors. The student perception that there is not enough time for study reflects structural constraints that determine how much time is left after social responsibilities have been met. This study has also shown that utilisation of study time, however, is affected by agency factors in the sense that students have a greater degree of control over how they manage study time. Self-regulation and study management, however, require forms of cultural and academic capital that disadvantaged students need to acquire within a very short period of time relative to more traditional undergraduate entrants with substantially different educational histories.

TPP is an open access program with no requirement for educational qualifications for entry and to this extent pathway programs contribute to social justice and equity targets by providing access to tertiary study. The present study shows, however, that time as a resource is inequitably distributed among the student cohort with some groups particularly disadvantaged by time constraints. Although the present study does provide evidence of how some students are able to overcome this advantage, further research is required to quantitatively assess the effect of time constraints on particular groups of students. In addition, further research is required to investigate if the factors affecting persistence with study, which have been identified in the current research, are distributed evenly among the whole student cohort. In particular more research is required to assess the impact of unpaid work on study outcomes. It would be useful to compare the effects of paid and unpaid work in terms of gender and student outcomes and distinguish between factors that influence the whole student cohort and those that affect only certain groups of students. Findings from the current study suggest that males may be impacted more by employment related constraints while females appear to be constrained by responsibilities related to carer and household duties. Further research is required to confirm this supposition.

The study has also shown the importance of analysis of habitus in researching the student experience on pathway programs. Interpretation of the findings through the lens of social reproduction theory reveals that time constraints often interpreted as reflective of a lack of time management skills are, in fact, reflective of values and dispositions towards education that derive from the habitus of origin. The present

study has shown how incongruence between the habitus of origin and that of the institution can result in student feeling they have to choose between self-development and fulfilment of family roles and this reduces the time available for 'quality' study. Corollaries that arise include perceptions of difference relative to peers, a sense of isolation and not 'fitting in'. Affective dissonance resulting from role and responsibility conflict can further detract from the quality of the student experience of tertiary study. Thus the present study shows that not all constraints are academic in nature although ultimately sociocultural and economic constraints result in difficulties meeting academic requirements in terms of meeting assignment deadlines or program completion. Although this study has made a small contribution to knowledge in this area, further research is required to show the influence of what Zepke and Leach (2010) call 'soft factors' that influence online and distance learner success in pathway programs.

Comparison of the experiences of students who achieve their personal learning goals in TPP with those who do not has resulted in a view of persistence that may not match institutional criteria for measurement of attrition and retention. In particular, the findings show that many students who fail to match the time frame imposed by USQ employ strategic withdrawal and repeat TPP to increase their chance of success. Thus one of the measurements of attrition from the university perspective (fail did not complete) can be reconceptualised as a means of enhancing attrition. The numbers of students who employ this strategy and the nature of outcomes is worthy of further investigation as it also has implications for allowing part-time enrolment in what is currently only a full-time program.

6.6.1. Recommendations for further research

1. Future research from the student perspective should focus on the role of pathway programs in enabling success in the first year of undergraduate study. Although anecdotal evidence exists that pathway students perform as well as traditional undergraduate entrants, it would be pedagogically useful to know what elements of the TPP experience contribute most to facilitating the transition to undergraduate study. The present study demonstrates the factors that facilitate successful persistence in pathway programs, but it cannot be

assumed that the same factors influence pathway students once they enter the first year of undergraduate study.

2. Future research is needed to provide additional evidence about the nature of relative disadvantage in TPP and other pathway programs. In particular, it would appear that students who are able to attend onsite support classes have a substantial advantage over students who reside out with travelling distance of a campus or cannot attend classes because of other commitments. Although it might appear intuitively obvious that onsite students have considerable advantages, this may not necessarily translate into better student outcomes either in terms of rates of attrition or academic grades. It is also possible that there are different success rates between different campuses.

6.7. Limitations

It is acknowledged that all research has limitations and this research project is no exception. The study set out to examine the student experience of constraints to persistence with study in a pathway program, and the ways in which successful students managed constraints to persist with study.

The role of the researcher can never be completely objective even if this is regarded as desirable, but in this study the role of researcher was combined with that of teacher practitioner on the program that was the focus of the study. This entails risks of bias and conflict of interest especially since the university was the effective sponsor of the research. Adoption of the student perspective necessarily involved the researcher in identifying shortcomings in current university policy and practices in as much as they contribute to constraints and attempts by students to overcome them.

One of the main purposes of the study was to provide an in-depth exploration of the factors reported by students as important influences on successful persistence. The intention was to examine a range of factors in depth but there are some factors such as health considerations that were not subject to in-depth analysis. A multiple case study approach did allow for consideration of a range of factors but this range was limited by the scope of the study and the participants sampled.

While a range of experiences and factors related to persistence were explored, it is ultimately the interactive effects of factors that determine persistence and this effect

is difficult to capture with the research design adopted. In addition, persistence in this study has been examined in terms of the interaction between factors in the microsystem and factors related to the university. From an ecological perspective, however, a more complete account of retention and persistence would involve different parts of the ecosystem such as the role of government initiatives that influence university policy and practices. For example, the fact that government subsidies and Centrelink benefits demand enrolment on a full time course may be as much an influence on strategic withdrawal as students' reflective practice.

Attempts to reduce researcher bias and increase the validity of the study have been detailed in the research design (chapter 3). Triangulation of data and bracketing of interviews were employed to reduce bias. Interviews employed prompts and open questions that allowed the research participant to voice their experience in their own words. The problem arising from the dual role of researcher and teacher on the program have been acknowledged in the Introduction to this study as well as chapter three. While all reasonable steps have been taken to reduce researcher bias, it is acknowledged that the interpretation of the student experience ultimately reflects the views of the researcher and the conceptual lens used to analyse findings.

The nature of case study design entails limitations about the scope of the study to generalise to other institutions and pathway programs. Nevertheless, the findings provide a more in depth account of student constraints to persistence, and therefore add substantially to other research using alternative methodological approaches. It is believed that the research approach adopted in the present study can be applied to other contexts and institutions that have pathway programs with similar student cohorts. There has been insufficient research from the student perspective, particularly in relation to pathway programs, and both the methodology and findings of the present study deserve replication in other Enabling programs in Australia.

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