Bridging to new possibilities: A case study of the influence of a bridging education programme

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Attestation of Authorship

I hereby declare that this submission is my own work and that to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements, nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed: Catherine Walker

Date: 11/07/2008

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Abstract

In the rapidly changing 'knowledge economy' where 'innovation' and 'responsiveness' are vital, tertiary education can be at a point transformation. Since the late 1990s the New Zealand government began to shift part of its tertiary education policy with an increasing focus on what is commonly called 'foundation' education. The shift was aimed at ensuring all New Zealanders are equipped for the knowledge economy and raising the skills of individuals. A variety of research and education programmes were launched, and existing foundation or bridging programmes strengthened through policy, research and educational endeavours.

Bridging education programmes (a subset of foundation education) are designed to prepare non-traditional and under-prepared students for ongoing study at a higher level. This current research sought to identify the influence of a university bridging programme (Level 4) on students who progressed into further study at undergraduate level. The bridging programme commenced in 2003 providing a pathway for students into undergraduate health degrees. The key question for this thesis was: *how does bridging education influence students?*

To determine the influence of the bridging programme, this research was based on a case-study of seven students who completed four or eight papers in the bridging programme. Participants were in ongoing study (for at least one year) in a Bachelor of Health Science (any major). The methodology was qualitative in design, drawing extensively on a case-study approach to research the influences of the bridging programme. The method of data collection utilised was individual semi-structured interviews with former bridging students to ascertain their perceptions, views and experiences of the influence of a bridging programme, both historically and currently. In examining this unique context, information on the influences of bridging education was explored and the importance of bridging education, from the participant's perspective, understood more clearly.

This thesis and the research within revealed that the influence of the bridging programme began at the participant's time of enrollment and continued into their undergraduate study and their lives. The bridging programme influenced the way participant's interacted with a range of factors including: the institution; their undergraduate programme; with educators and peers; and with family, friends and others in society. Equally, it is acknowledged that these factors influenced the participant's, facilitating or impeding their ongoing learning. The participants also

identified several challenges (financial and relational) related to the influence of tertiary study which they faced.

The research revealed the programme influenced their ongoing success and continuation in undergraduate study. The programme provided an effective bridge into tertiary education (academically, emotionally and socially). Participant's acknowledged the influence on their cognitive and meta-cognitive growth and development. The range of tertiary leaning skills and knowledge gained and/or enhanced was considerable. Close links between the academic skills taught in the bridging programme and required in undergraduate study were evident. Positive improvements in confidence, self-efficacy and motivation were also attributed to the influence of the programme. Holistic personal development occurred as the skills and knowledge gained and developed were transferred and extended from academia into other areas of the lives of former bridging students and thus further influenced their family, personal friends and society. The influence of the bridging programme has enabled new opportunities, ways of being and employment to become more than a dream, but a reality which the participants continue to move towards. Overall, it could be claimed that the influence of the bridging programme was holistic.

A series of recommendations are provided for theory, policy and practice. The significance for social issues and action are discussed and avenues for further research outlined.

Chapter 1: Introduction

> Plato is reputed to have said "The beginning is the most important part of the work". Each unique life is altered and influenced by a myriad of factors and circumstances. Paths intersecting, meetings and opportunities which can change the intrinsic being, for better or for worse, or simply be passed over. We are not powerless in the process, the choice is ultimately ours, to see, feel and respond, to act on, and be acted upon. The process of becoming is not a destination but a journey. Small opportunities are often the beginning of great things. A window of opportunity has led this thesis journey to begin, what will be the end? (Personal research journal entry, February 18, 2006)

Overview

"If you don't know who wrote it, you won't understand it" (Anderson, 2004, p. 239). Based on Benjamin Bloom's work, Anderson asserts that to understand a person's work you must first know something about the author. This chapter begins by outlining my journey to this point and briefly outlines some of my philosophical beliefs that influence both my choice of employment and the research topic. It outlines the purpose and potential significance of the research, and concludes with an overview of the Chapters that follow.

My Journey and Pre-understandings

As a girl I could not decide whether to become a nurse, a teacher, or a doctor. For a variety of reasons, following secondary school, I gained a qualification as a Registered Comprehensive Nurse and began a nursing career. I had always been interested in education and throughout my nursing career involved myself in a variety of education and training positions. In 2003 AUT University commenced a health focused bridging programme and I seized the opportunity to commence my journey as a university lecturer in a Level 4 (on the National Qualification Framework, NQF) certificate bridging programme, and left my job as a school nurse. That transition has proved to be one of the best junctures of my life, allowing me to complete a 'Certificate in Tertiary Teaching' and commence the Master of Education (MEd) journey, to which this is the final act. This experience has formed a bridge to the possibility of gaining a doctorate, and could lead to further opportunities. While not the original plan of being a medical doctor, life is never what you think, but provides moments of decision and transformation for those willing to take a risk and try something new.

While working as a school nurse in South Auckland (in a low socio-economic area), I was confronted with the realisation that many individuals in the education system were

confronted with numerous challenges which created barriers to completing secondary education and beyond. Some of the youth who came to the school health clinic implied their families were financially struggling and many came to school hungry. Whilst the clinic primarily assisted with the health concerns of the students, we also provided a range of holistic care, including food and where necessary, referrals for the many 'non medical' needs that confronted the students. The possibility of tertiary education was not considered by many as the social constraints caused the youths to seek employment rather than further their education. Many found school a challenge, not because they were not academically able, but rather because they were 'bored by the teacher', and so many gave up, 'attending to eat lunch' as one student told me. I believe that tertiary education in New Zealand is valued by sectors of society. With relatively open access and student loans readily accessible, many people seek to gain a degree and the possibility of a better life with improved employment opportunities. Although, I am aware of the differential constraints of various groups taking out student loans and the vastly different work-related opportunities and finances to repay them. Yet, many of the students I met in South Auckland would not be able to access tertiary education because they were under-prepared or ineligible for tertiary study, and consequently had significant barriers to overcome.

As a bridging educator I have the privilege of working with a highly committed cohesive team who, each in their own way, values the opportunities to work with bridging students. Bridging education is aligned with my personal beliefs and interest in equity and social justice. Bridging education offers 'ineligible' or academically 'unprepared' individuals opportunities to progress their educational and career goals. While not overt, bridging education can provide a pathway to fulfil an individual's latent potential, one that for a wide variety of complex reasons has been withheld, crushed or blocked. The alignment of my beliefs with my role as a bridging educator is invigorating and challenging. As an educator, I have experienced personal and professional growth through a range of interactions including my peers, mentoring, through practice and interaction with students, my MEd studies, the New Zealand Association of Bridging Educators (NZABE, a professional body) and the NZABE conferences.

The focus of the AUT University MEd coursework led me intermittently to study literature related to bridging education. The literature on bridging education in New Zealand is limited (though growing) and so international literature (using the terms

bridging, enabling, developmental, or access education) formed the basis of much of what I know and have grown to a deeper understanding of.

My previous role as a school nurse had enlightened me about the need for such programmes. Yet as a relative newcomer to the field of education I was surprised at the breadth of the foundation learning sector in New Zealand and the focus of government policy on Foundation Education, demonstrating its importance in the tertiary education sector, particularly for 'disadvantaged' and non-traditional students. Based on literacy, numeracy and language (LNL) teaching, foundation learning occurs in a wide range of contexts and is funded from a diverse range of sources. "Teaching takes place under a range of titles including: adult literacy, numeracy, ESOL, family literacy, whanau literacy, foundation skills, learning support and bridging education" (Benseman, Sutton, & Lander, 2005, p. 17). Bridging education, a subset of the foundation learning sector, aims to teach students "the requisite academic skills to a level sufficient to enable them to enroll in other tertiary programmes to which they would not otherwise be able to gain entry" (Benseman & Russ, 2003, p. 43). At AUT University where I work, the bridging programme (NQF Level 4) enables students to gain entry to one of thirteen undergraduate degree programmes (starting at NQF Level 5) with a health focus.

AUT (2001) University is committed to equity and diversity, the third goal of the Charter is to deliver "equitable opportunities for the diverse communities that the university serves" (p.6) and the Strategic Plan (2007-2011) reinforces this commitment stating that:

> AUT University will continue to be a university of opportunity. We will continue to support and encourage communities and groups who have been traditionally under-represented in higher education. This includes providing accessible and equitable pathways of learning from pre-degree to postgraduate levels, developing and maintaining targeted academic support programmes, and fostering social networks for students. We welcome diversity and encourage all staff and students to reach their potential, mindful of culture, socio-economic background, gender, disability, sexual orientation, ethnicity, age, or life experience. (AUT, 2007, p. 10)

As New Zealand's newest university, with a strong history of applied learning, AUT University is committed to remain student-centred and to provide a learning environment conducive to success (AUT, 2007). The first strategic theme of the AUT University Strategic Plan (2007-2011) is to "provide excellent education that inspires students to reach their full potential" (AUT, 2007, p. 6). There is a commitment to provide a range of pathways into higher education including: "extending and strengthening opportunities for students to undertake pre-degree and foundation

programmes at Level 4 that will prepare them for university study and inform their choice of qualification"; and "Ensuring that students entering higher education programmes acquire the skills for success" (AUT, 2007, p. 7). It seemed that the bridging programme on which I taught was accomplishing these aims, equipping students with the skills for success and not just academically.

I had encountered students on the campus who had completed their bridging papers and entered undergraduate study. They were happy to acknowledge and engage me in conversation indicating the changes and influences, both academic and social, which they attributed to the bridging programme. This led me to believe that there could be a clear educational, affective and social influence on students in the bridging programme. Repeated informal conversations with students indicated they were influenced academically, gaining or developing academic writing skills and health related content knowledge required for successful study at tertiary level in a Health Faculty. They suggested they felt motivated and equipped with at range of strategies to succeed. They also reported the programme had influenced them socially; exposure to new people, experiences and knowledge caused their thinking, feelings and behaviour to change. Others associated the programme with broader positive on their lives and the lives of their families. The possibility that bridging education could in part intensify or facilitate a holistic influence interested me.

My nursing education and training had influenced me to see individuals as holistic beings rather than as an individual with separate and disconnected areas of involvement. The integration of mind-body-spirit means that as one part of life is influenced, there will be adaptation and change in other areas of an individual's life (Korthagen, 2004; Yorks & Sharoff, 2001). The stories and comments from former students were anecdotal but seemed to be representative. This sparked an interest to identify and understand the influence of bridging education. Therefore, there was a clear possibility that the bridging programme had a holistic influence.

One of the last MEd papers I completed required the formation of a research proposal and ethics application. The opportunity to further research bridging education, develop a focus, and prepare for the final phase of study was fundamental to this thesis and the research within. In the past two and a half years, this thesis has become a significant part of the tapestry of my life journey and a challenge, professionally, academically and personally as a full-time bridging lecturer and part-time student. The study and processes related to this thesis has grown my confidence as a postgraduate student,

researcher and an educator. Taking risks educationally has been a large part of the past five years as I have journeyed toward this thesis and the MEd process.

This research originated from my role as a bridging educator and a desire to more fully understand the influence(s) of bridging education. The limited contextual literature and research, as well as the course work formed a foundation for the thesis. Bridging students experience unique contextual influences due to their past experiences and their status with the tertiary system (Benseman & Russ, 2003) and a range of research shows the academic and affective influence of bridging programmes. Cantwell (2004) reported a bridging course enabled participants to successfully complete study at undergraduate level and had caused affective changes, including personal development and underlying motivational and epistemological changes. Cantwell (2004) asserted that enabling (bridging) courses must incorporate a deeper socio-educational sense, rather than just training students with the skills needed for university. The socio-educational link made in the article and former bridging students reporting informally that they themselves and their immediate context (family, friends and peers) were influenced by the bridging programme was instrumental in setting the provisional focus of this research, and led to specific aspects of this research. But the importance and influence of bridging education to the students was unclear.

The Research Purpose and Potential Significance

The purpose of this research was to explore the participants' (former bridging students) views and understandings of the influences of a bridging programme from a holistic perspective. I also hoped to be able to gain understandings of the multiple contextual influences and their effects on the participants' development. The final overarching research question was: *How does bridging education influence students?*

Marshall and Rossman (2006) suggest that research should pass three challenges: that the study will contribute to theory and research; is feasible; and the researcher is engaged in the topic. Bridging education is important as it provides students opportunities to higher level studies. I believe it is important to tertiary institutions as it increases the numbers of students entering (and importantly completing) programmes, and to the economy as the students' contribution after completion of their studies is potentially greater than before. And it is personally of interest.

In seeking to understand the holistic influence of bridging education on students in ongoing study, a suitable context was the bridging programme within which I teach. By

situating the research within a specific university bridging programme, where former bridging students were specifically prepared for their undergraduate study, the holistic influence of bridging education could be discovered. As an 'insider', further understandings and insight may be gained. The overarching study design was therefore a case study approach utilising in-depth interviews with a range of former bridging students from the Health Faculty. Detail on the research design is provided in Chapter 4.

There is a dearth of literature on the holistic influence of bridging programmes in New Zealand and worldwide. This research would add to the New Zealand literature regarding the affective and cognitive outcomes of bridging education and provide some insight into the holistic nature of bridging education. It would also potentially provide strategies for enhancing bridging programmes within the institution. Furthermore, the research would provide a 'voice' for former bridging students about their experiences in the bridging programme and their undergraduate study, as well as other relevant aspects of their lives.

The research would be significant in several domains drawing on the four areas outlined by Marshall and Rossman (2006, pp. 35-38):

1. Significance for theory: while not an intended outcome of this research, by adding to the limited literature on this topic, this could be a catalyst for new theory development that was more global and holistic in its approach or build on or extend current theory.

2. Significance for policy: by providing data on the influence of bridging education for the programme and Faculty. By supplying qualitative data that can support the universities commitment to equity and excellence. By impacting upon AUT policy regarding bridging programmes.

3. Significance for practice: by providing data for improvement and change, responding to the changing needs of bridging students' in terms of engagement, and the learning teaching interface.

4. Significance for social issues and action: by its significance to policy and practice above, as bridging education is inherently an issue of social justice, equity and action. By raising and reporting the lived experiences of former bridging students, and I hope, by providing avenues for further conscientisation and action in terms of further research publications.

It is hoped that this research will engender opportunities for change and improvement in the collaboration between students and bridging educators, as the influence of the programme becomes clear. This research will be personally significant in that it is my first major research project, and the findings will further inform my practice and commitment to change, improvement, and working collaboratively with students.

During the process of this research the question '*How does bridging education influence students?'* has been developed and answered and is reported in this thesis as outlined below.

Chapter Overviews

This thesis is organised in several sections. The first Chapter has outlined my personal and research journey which has shaped the present study. The research was briefly presented and the purpose and significance discussed.

In Chapter 2 and 3 literature was reviewed focusing on three main areas of inquiry which underpin this study. First, in Chapter 2, the New Zealand tertiary education system and government policy related to bridging education was outlined. Secondly, philosophical underpinnings of bridging education, being critical, transformational and emancipatory learning are briefly reviewed, including Freire's and Mezirow's work, and Bronfenbrenner's bioecological theory is also briefly discussed. Finally, in Chapter 3, literature related to bridging education was discussed to elicit the possible range of influence.

In the fourth Chapter, the methodology was outlined. I explained the theoretical position of knowledge construction embedded in this research. The background to the research context, the bridging programme in which the study is set, was discussed and the method of data collection, ethical considerations and process of data analysis were also presented.

In Chapter 5 the findings were presented. The participants and their backgrounds were introduced. The data gathered was presented with substantial extracts from participants transcripts based on three common themes: the influences experienced during the bridging programme; the influences experienced relating to the participants ongoing academic study; and finally, the influences outside of academia.

On the basis of the findings, Chapter 6 discussed the role and influence of bridging education as experienced by participants. The influence of philosophy, pedagogy and the personal and social influences experienced by participants were discussed.

Chapter 7 concluded the thesis with a summary of the findings of this study. The strengths and limitations were discussed. The implications of this research on bridging and education were provided and recommendations for practice made. Possible areas of future research form the final section of the thesis.

Chapter 2: Literature Review: Bridging Education in Aotearoa New Zealand

> If "successful research is based on all the knowledge, thinking and research that precedes it" as Anderson (1998) asserts then I have an enormous task ahead. 'All' is more than a Master's thesis, so where do I situate this study? How broadly do I focus? The path to knowing is neither singular nor simple. There are so many gaps in my knowledge and the available literature on bridging education in New Zealand is contextual. Where can I draw links and parallels? To be equipped for this research journey I need to reveal and resolve a path ahead, as crooked and tenuous as it feels. (Personal research journal entry, July 17, 2006)

Overview

Chapters two and three critically review a range of literature that provides a rationale for the research. Due to the breadth of the research topic and quantity of contextual literature reviewed, it was organised into two chapters. This chapter was structured to explore the influence of bridging education in the Aotearoa New Zealand context. Literature related to bridging (in its many forms) and, where appropriate, literature related to general education has been used. First, tertiary and bridging education in Aotearoa New Zealand was discussed to situate the research in context. A philosophical basis (including critical and transformational perspectives) and related theory for bridging education in the context of this study will also be discussed.

Tertiary Education in Aotearoa New Zealand

Learning occurs throughout the lifespan in both formal and informal settings. Formal education in Aotearoa New Zealand is the primary means for the development of knowledge and skills within the population (Ministry of Education, 2006). Compulsory formal education affects all people aged from six to 16 years (the school leaving age). Tertiary education describes all aspects of post-school education and training, and is normally open to school leavers who gain university entrance criteria through school examinations and those over 20 years (touted as proof of our egalitarian educational ethos) (Benseman, 2002; Duke, 2002). However, some courses such as medicine or nursing also have entry-level subject requirements (Duke, 2002). Tertiary education is associated with improved employment and the consequent societal benefits (Anderson, 2007). Open entry has several draw backs including: poor links between institutions; high recruitment of often unprepared students with resulting high failure rates (and resulting debt); and additional stress for educators and students (Duke, 2002). These factors and the significant shift in educational policy, which began in the early eighties, are important in understanding tertiary education in New Zealand.

Since 1984 significant changes in Aotearoa New Zealand's economic, social and education policy have and continue to influence the tertiary education sector which is based on neo-liberalism or economic rationalism (Olssen, 2002). Educational reform sought to improve Aotearoa New Zealand's "competitiveness in global markets, to create a modern education system that would encourage lifelong learning, and to increase skill levels in the labour force" (National Qualifications Framework Project Team, 2005, p. 3). The series of tertiary reforms "will also create a sector more responsive to national and regional priorities" (Benseman & Sutton, 2008, p. 6). Linking of the economic and educational growth agenda's by government has contributed to the massification of tertiary and higher education worldwide (Barrie, 2006).

Equity policies (some underpinned by Treaty of Waitangi obligations) and concern for disadvantaged and under-represented groups in tertiary education (such as Māori and Pasifika) saw the government commit itself to widening opportunities for all peoples (Duke, 2002). De-regulation of the Aotearoa New Zealand tertiary education sector with the passing of the Education Amendment Act of 1990 resulted in a range of tertiary education providers (including Universities, Polytechnics, Wānanga and Private Training Establishments [PTEs]) offering courses at widely different levels, from transition or bridging programmes to postgraduate study and research (Ministry of Education, 2006). This, along with the relative open entry, enables students of all ages, ethnicities, educational backgrounds and abilities to enter tertiary education. This resulted in tertiary institutes having students with a broader range of abilities and demographics.

Many of these students are underprepared, so initiatives such as bridging programmes emerged (Coltman, 2004). New Zealand's educational history can be "characterised as one of cycles of exclusions and access mirroring political and social change" (Anderson, 2001, p. 102). With tertiary education viewed as primarily a private good and a market-driven approach having been instituted (Adams, Clark, Codd, O'Neill, Openshaw, & Waitere-Ang, 2000; Ministry of Education, 2006) tightening of the regulations resulted with the formation of the National Qualifications Framework.

The New Zealand National Qualifications Framework

A National Qualifications Framework (NQF) was developed in the early 1990s, to establish standards and qualification types for secondary schools, in post-school education and training, and at Tertiary Education Institutions (TEIs) This was based on

ten levels, from certificates to postgraduate qualifications (National Qualifications Framework Project Team, 2005). Most qualifications on the NQF are based on 'units of learning' or 'unit standards' and 'achievement standards'. Vocationally orientated, it attracted significant academic and professional criticism and institutional resistance (Duke, 2002). Since 1996, the university sector qualifications are approved by the Committee on University Academic Programmes (CUAP), an inter-university Quality Assurance body. These qualifications are aligned to the NQF leveling system and included in the Register. Polytechnics, Colleges of Education (now part of other TEI's), Wānanga, and Private Training Establishments (PTEs) also have local qualifications not based on unit standards, or not on the NQF (National Qualifications Framework Project Team, 2005). This diversity of qualifications set by differing institutions has not enhanced collaboration and student progression between institutions (Duke, 2002).

Qualifications on the NQF are placed at one of ten levels reflecting the content of the qualification and the complexity of the skills and knowledge being recognised (National Qualifications Framework Project Team, 2005). The least complex is Level 1 (also capturing all learning beneath this level) and the most complex is Level 10. Certificates can be set at Level 1 to 7 (the majority at Levels 1-4), diplomas are set at Levels 5 and 6 and bachelor's degrees, graduate and postgraduate qualifications are at Level 7 and above. Level 4 fits between secondary school qualifications -National Certificate of Educational Achievement (NCEA) Years 11 to 13 (Levels 1-3) and undergraduate study (Levels 5-7). Each level has an agreed set of title definitions or descriptor outlining the processes, learning demand and responsibility. The NQF level descriptors are not explicit but rather a broad indicator of the learning process, demand and responsibilities. The descriptor for Level 4 is outlined below:

> At Level 4, learners carry out processes that require a wide range of technical or scholastic skills, offer a considerable choice of procedures and are employed in a variety of familiar and unfamiliar contexts. The learning demand employs a broad knowledge base incorporating some theoretical concepts, analytical interpretation of information, informed judgement and a range of sometimes innovative responses to concrete but often unfamiliar problems. The learners responsibility is applied in self-directed activity, under broad guidance and evaluation, with complete responsibility for quantity and quality of output and with possible responsibility for the quantity and quality of the output of others. (National Qualifications Framework Project Team, 2005, p. 12)

The variety of qualification levels and types, the drive for qualifications in the knowledge society and the formalisation of trades to degree status (such as engineering and nursing) has seen the profile of tertiary students significantly change in the past 20

years (Adams et al., 2000; Ministry of Education, 2006). School leavers are required to have higher skills to maintain employability in the rapidly changing information age (Coutts, 2006). Attaining a qualification or degree from a university or tertiary institution has become a norm in society (Benseman & Russ, 2001), and is an economic necessity due to the structure of the education system and the demands of the knowledge society (Ministry of Social Development, 2007). Labour market demands have caused higher education institutions to broaden access by reducing selection and admission criteria (Watson, McSorley, Foxcroft, & Watson, 2004). However, increasing societal demands do not always correlate with the ability, knowledge and skills of students leaving secondary education and entering employment or tertiary education. Political agendas have for the last decade sought solutions to address the educational polarisation of Aotearoa New Zealand society. Educational policy indicates the governments focus to ensure students without adequate skills continue to have available lifelong training opportunities. Raising foundation skills is one such focus of government policy.

Government tertiary education policy and foundation learning

The Ministry of Education statement of intent includes the aim to raise achievement and reduce disparity, as Aotearoa New Zealand has one of the widest gaps between the lowest and highest learners (Ministry of Education, 2005). The Tertiary Education Commission (TEC) Te Amorangi Mātauranga Matua is charged with the "responsibility for leading the government's relationship with the tertiary education sector, and for policy development and implementation" (Tertiary Education Commission, 2007a). The TEC provides strategic direction for all areas of tertiary education and ensures the sector implements the government's *Tertiary Education Strategy* (TES) and *Statement of Tertiary Education Priorities* (STEP).

The TES outlines the tertiary sectors strategic plan for a five year period and is a "blueprint for a collaborative and co-operative tertiary system that contributes to Aotearoa New Zealand's national goals and is closely connected to enterprise and local communities" (Tertiary Education Commission, 2006). In both the TES 2002-2007 and 2007-2012, the stated goals include success for all Aotearoa New Zealanders through lifelong learning; improved retention and completion for all students, particularly Māori and Pasifika, and raising foundation skills (Tertiary Education Commission, 2002, 2006). Foundation learning occurs in a range of contexts, including universities, polytechnics, private training establishments and in the workplace (Benseman & Sutton,

2008). Foundation skills are not clearly defined, but since 1996 they have included a cluster of skills such as literacy, numeracy, language, technological literacy, communication skills, teamwork, self-confidence and 'learning to learn' skills (Benseman, Sutton, & Lander, 2005; Tertiary Education Commission, 2007b). One of the stated priority outcomes in 2007-2012 is "[i]ncreasing educational success for young New Zealanders – more achieving qualifications at Level 4 and above by age 25" (Tertiary Education Commission, 2006, p. 1) to enable all people to participate in Aotearoa New Zealand's knowledge society.

Foundation learning has been long underfunded and resourced (Benseman & Sutton, 2008). Despite the government's recent initiatives and an array of political agenda's over the past decades, inequalities still exist (Coltman, 2004). Infrastructure to support foundation learning (through projects such as 'Learning for Living', research and development, and national qualifications for foundation educators) are being developed and strengthened to ensure policy is informed by evidence and the needs of the adult population are adequately met (Benseman & Sutton, 2008). Strategies that address the inequities of participation and success in tertiary education programmes necessitate that central government and individual institutions act. Foundation and bridging education is a proven and successful strategy that improves participation in tertiary education.

Participation by School Leavers in Tertiary Education

Participation in tertiary education by school leavers is significant, although numbers dropped slightly in 2006 (Ministry of Education, n.d., a). In 2004, Aotearoa New Zealand was seventh out of 28 countries in the OECD having 30 per cent of students enrolled in tertiary programmes (Ministry of Social Development, 2007). This was supported in part by bridging education increasing access to tertiary education. There was also an increase in the numbers of school leavers who achieved qualifications enabling them to have direct entry into tertiary study at a degree level from 27 per cent in 2002 to 36 per cent in 2006 (Ministry of Education, n.d., b). However, while this increase in school leavers eligible for tertiary education at degree level is an improvement, there remains a significant number (64 per cent) of students who were ineligible. Various government web sites provide conflicting data, but according to Education Counts (n.d.) there were 78,008 first year enrollments of domestic students in 2006, of which 13,178 commenced a Level 4 certificate (close to 17 per cent).

Associations between academic achievement at secondary school and participation in tertiary education are well documented in the literature. Leach and Zepke (2005)

conducted a systematic literature review and found that many studies identify academic aptitude and achievement as a critical factor influencing decisions about further study. They synthesised thirteen findings organised under four themes: decisions, influencing factors, information and diversity. Entry to tertiary study is influenced by a number of factors, but socio-economic status was the strongest predictor (Leach & Zepke, 2005). Parents, family experiences, academic achievement, subject area interest, financial cost of attending tertiary studies, interpersonal information schools and diversity related to non-traditional students were other significant influences (Coutts, 2006; Leach & Zepke, 2005).

Ussher (2008) reported that academic achievement at secondary school (Year 13, NCEA Level 3) was a strong predictor of participation in bachelors-level study. Maani (2006, as cited in Ussher 2008) found that academic performance explained participation in tertiary education and that passing Year 12 increased the probability of participation in tertiary education (of some kind) by age 18 by 15.4 per cent. Ussher (2008) noted that in 2004, most participants in non degree tertiary study were those who had completed NCEA Level 2 or were individuals with no qualifications. He notes that in comparison, those with NCEA Level 3 were more likely to enroll in degree level study within two years of leaving school. Ussher (2008) also noted school leavers, both male and female, of Māori, Pasifika and Asian decent, whose education was in a medium or high decile school (serving moderate to high socio economic status communities) were also more likely to enter non-degree study (Level 4 to 7). He suggests that peers strongly influence the tertiary education choices of school leavers. Māori and Pacific Island peoples in Aotearoa New Zealand are less likely to gain the qualifications required to access degree level tertiary education programmes (Loader & Dalgety, 2008). Under-prepared students seeking entry to undergraduate tertiary programmes is a significant problem for both the individual and the institution (Coutts, 2006; Schmidt, Mabbett, & Houston, 2005). While a significant number of school leavers have few or insufficient qualifications, many engage in tertiary education either immediately, or after some time in employment. This poses bridging educators a challenge to ensure a smooth and effective transition into tertiary education for under-prepared students (Coutts, 2006).

Under-prepared students

Historically, public education was seen as a way to impart values into the next generation and provide the range of skills (such as literacy and numeracy) for fulfilling

those values and participating in society (Gilman, 1997). Education has social benefits, it is a way to eliminate poverty and improve citizenship (Anderson, 2001). Despite free formal education, not all students are well prepared. Open access to tertiary education for those over 20 years has been an important entry mechanism for many individuals, yet is no guarantee of success. The 1996 International Adult Literacy Survey (IALS) findings indicated that a significant proportion of adult New Zealanders had considerable literacy difficulties, which were not confined to any particular social group (OECD, 1997). In 2006 the Adult Literacy and Life skills survey (ALL) (the successor of IALS) was undertaken and "from 1996 to 2006 the proportion of the adult population of Aotearoa New Zealand with very low literacy skills reduced substantially, but a proportion with low literacy skills persists" (Satherley, Lawes, & Sok, 2008, p. 4).

School leavers, mainly Māori, Pasifika and male students with some completion of Level 1, 2 or 3 but without university entrance, or those with little or no formal attainment are most likely to enter university study through discretionary entrance and a bridging programme (Loader & Dalgety, 2008). Among those the schooling system failed, Pasifika people are disproportionately represented (Benseman, Coxon, Anderson, & Anae, 2006). Pasifika peoples are also under-represented in tertiary education compared to Europeans, Asians and Māori (Loader & Dalgety, 2008), although their participation has improved over the past decade due in part to bridging programmes and open entry for students over 20 years (Benseman et al., 2006).

Many university entrants lack the necessary skills for tertiary education (Coutts, 2006). In 2004, Canterbury University found that only 23 per cent of all students had all the expected skills for a university entrant (Armfield, n.d., as cited in Schmidt et al., 2005). Ley and Young (1998) cite evidence which estimates that one third of students entering universities and colleges in America are underprepared or lack the skills needed to be successful. Research in a New Zealand Polytechnic found that first year degree students, many direct from secondary school, appeared poorly prepared for tertiary education by their secondary schooling (Mabbett, Schmidt, & Houston, 2005; Schmidt et al., 2005). This included difficulty integrating into the tertiary environment, lack of knowledge and application around study skills and for some, an inability or unwillingness to persist and succeed. Du Bois and Staley (1997) assert that many tertiary students lack the motivational, volitional and productive learning characteristics necessary for tertiary learning. Rather, the students beliefs and knowledge about learning can impede learning and their effectiveness in employment. Bridging programmes are a suitable transition

for underprepared students and as Schmidt et al., (2005) note that students are willing and would prefer to complete an 'introductory year' if they are equipped with the skills and knowledge required for ongoing undergraduate study.

Bridging Education Programmes

Defining bridging education is problematic for academics, tertiary staff and educational policy makers. When the Tertiary Education Advisory Commission (2000) made the 'acquisition of foundation skills for all' an educational priority, the Ministry of Education, as the policy arm of government, began to engage in debate around defining and describing key terms such as 'foundation skills' and 'key competencies'. Bridging education is seen as a subset of foundation education that specifically prepares students for further study, without necessarily providing them with a nationally recognised or devised qualification (Anderson, 2001; Benseman et al., 2005; Coltman, 2004), although this is not formalised in any Ministry or government documents. Ministry of Education literature however, clearly states foundation skills programmes exist to provide opportunities for the development of literacy, numeracy and oracy skills, with the aim to specifically increase social, employment, economic and community engagement for all peoples (Ministry of Education, 2004).

Bridging education programmes in Aotearoa New Zealand were slower to develop than their counterparts in Australia, the United Kingdom and North America due to the open entry policy of New Zealand universities for students over 20 years. Since the mid-1980's, bridging education programmes in New Zealand have been offered by many tertiary education institutions (Maharey, 2001) and are currently present in all the universities, polytechnics and many other TEI's. Emerging within a market driven economic setting that saw tertiary institutions prioritise economic and financial accountability (Adams et al., 2000), funding for bridging programmes has been tied to political determinism and individual institutions' commitment (Coltman, 2004). This has resulted in such programmes being marginalised, developed without national co-ordination at institutional levels (Benseman, Sutton, & Lander, 2003) and has left the New Zealand field with an under-developed base of theory and research (Anderson, 2001). Yet despite this, participation at certificate level (where bridging programmes sit) has steadily increased (Ministry of Social Development, 2007). By targeting non-traditional and under-achieving students institutions were able to grow student numbers (Coltman, 2004) and consequently, gain more funding, causing competition between institutions during a period of uncapped growth (Duke, 2002). The current TEC policy

has however, seen the funding formulae change and funding for students is capped for a three year period (Tertiary Education Commission, 2007c). This will create greater funding certainty and better position institutions to resource bridging programmes, which traditionally have often been marginalised (Benseman & Sutton, 2008).

Bridging programmes were developed with diversity in models of delivery, skills and knowledge of staff, although they tend to focus on the delivery of academic skills and introductions to specific tertiary programmes (Benseman & Russ, 2001; Coltman, 2004). Bridging programmes need to provide a variety of courses to meet a range of identified learning needs, activities and support services based on a bridging pedagogy (Anderson, 2002). Programmes that focus on purpose and product rather than standardised content enable students from diverse backgrounds to apply the skills and knowledge in a range of ways (Cantwell, 2004; Coltman, 2004). Graduates of bridging programmes can gain access to undergraduate programmes within and between institutions where the programme has been accredited (Cheong, 2000; Duke, 2002).

Bridging education programmes enable under-qualified students to gain qualifications to enter tertiary courses by preparing them with the skills, knowledge and confidence needed for study at tertiary level and/or employment (Anderson, 2007; Benseman et al., 2005; Cheong, 2000). These programmes have been developed in many countries in response to issues of equity and social justice and the development of a workforce which requires educational credentials to secure meaningful employment (Anderson, 2001, 2007). Bridging programmes are vital in addressing equity and access to tertiary education particularly for students failed by the school system, such as those with behavioural differences, and Māori and Pasifika students (Morgan, 2004). The survey by Benseman and Russ (2001) suggested that approximately a thousand students per year participated in bridging education, of which 56 per cent appeared to be Māori or Pasifika. They aim to increase the participation and success of diverse and often non-traditional student groups, and to counter the personal, social, academic and financial barriers experienced by people who want to succeed in furthering their education by developing a range of foundation skills and knowledge.

While at a surface level institutions can be very different, the following range of factors is critical to successful programmes:

> A clear purpose, and high performance standards (programme effectiveness standards); shared leadership, strong community support, and talented, hard working teachers (school climate); opportunity to learn and curriculum integration (curriculum); and concern for students and non acceptance of failure (teaching).

The nature of success is complex and is produced by an interplay of constructs. (Anderson, 2004, p. 117)

Other factors influencing the effectiveness include: the extent of the programme and institutions services; the duration of the programme; the strategies used to influence student learning; the interests, needs and resources of the student's local community (Oesterreich, 2000). The focus of the programme should be on readiness rather than re-mediation, providing educational strategies that give students the information and experiences necessary for tertiary success (Fenske, Geranios, Keller, & Moore, 1997). As well as programme and institutional characteristics, the classroom context is also important. Anderson (2007) suggests that bridging should be assessed at three levels: first, "the current and successful engagement" of students in education, second, "successful transition to, and participation in the destination programme or workplace", and thirdly, in "preparation for survival and better in our rapidly changing world of technology driven change" (p. 454).

James (2000) contends that within a market based economy, "the rhetoric of equity has been replaced with the notion that individual choice and higher education outcomes are increasingly defined as a private rather than a public good" (pp. 105-106). Yet bridging appears to balance both issues of equity and private good. Bridging education is complex and full of contradictions making it both problematic and capable of generating creativity and innovation (Anderson, 2002). People with low levels of education are marginalised and more vulnerable in a knowledge based economy, however, bridging programmes provide access to the economic and social advantages afforded as a result of tertiary education for non-traditional students (Silburn, 2005). Bridging programmes are seen as "forums for demystification, for valuable connectedness and for engaging diverse potential and talent that would otherwise be lost to academic endeavour" (Morgan, 2004, p. 27). Their social role and the way they facilitate the learning process is worthy of consideration in improving the lives of non-traditional students.

Bridging students - non-traditional students

Bridging students are most often non-traditional students, who enter university without the traditional school leaving entry criteria or have acquired the criteria for entry but did not pursue formal qualifications since leaving school (Hayes, King, & Richardson, 1997). While the term 'non-traditional student' is contentious, it refers to a diverse range of people traditionally under-represented in tertiary education. It applies to women, minority ethnic groups, mature students, those from lower socio-economic

backgrounds, those without ease of access to TEIs and people who are generally 'at risk' in some way of not fulfilling their potential (Leach & Zepke, 2005). Many of these students are vulnerable and do not have the same access to human, social and cultural capital as some of their peers (Silburn, 2005). They have often been alienated by a school system that did not work for them and have little faith in their academic ability (Trewartha, 2001), and previously may have shown little interest in tertiary education (Danaher, Willans, Forbes-Smith, & Strahm, 2006).

Non-traditional students make up a substantive number of tertiary students and Hayes et al., (1997) assert they are outnumbering 'traditional students' leaving school with university entrance qualifications. Increased participation in tertiary education by non-traditional students is caused by several factors, including: the changing attitudes towards education in the wider community, increased demand for qualified employees, and the knowledge explosion and associated technological advances (Devlin, 1996); the government's desire to increase and widen participation in tertiary education (as evidenced by policy already discussed), and institutions keen to attract students (Leach & Zepke, 2005).

Non-traditional students are a diverse group differing from traditional students and amongst themselves. Some identify as normal students whilst others recognise and relish their differences (Devlin, 1996). As a diverse group, entrance to university is through bridging programmes, government open entry policy and a variety of special entry criteria such as university equity policies, with the goal of increasing the number of under-represented groups in universities (Blaxter, Dodd, & Tight, 1996). They are often marginalised by their lack of academic capital and by domestic, social and financial circumstances that frequently are different to those of the traditional student (Wilson, 1997). Populations traditionally underserved by tertiary education (students of colour and from low-income groups) experience persistent achievement gaps (McClenney & Greene, 2005). Those non-traditional students who gain direct entry to undergraduate programmes often struggle more than those who first completed bridging programmes (Silburn, 2005), due to many having had negative or limited educational experiences (Benseman & Russ, 2001).

An important New Zealand research study by Benseman and Russ (2001) surveyed 29 bridging programmes "mapping the territory" to gain an overview of the field. They identified a number of demographics and characteristics of bridging education in New Zealand. Bridging education students were predominately female (64.4 per cent) and

pakeha (46.5 per cent), although included a range of ethnicities: Māori, 29.2 per cent; Pasifika, 15.4 per cent; Asian, 4.4 per cent; and other, 4.5 per cent. The majority of bridging students were aged less than 25 years (53.2 per cent), while 44.2 per cent were between 25-50 years and 2.5 per cent were over 51 years. Benseman and Russ (2001) also identified a range of educational qualifications with which students entered bridging programmes (sixteen of the twenty nine programmes responded to this question). Students who entered bridging programmes without any school qualifications ranged from 0-100 per cent, with ten programmes reporting 80-100 per cent. Current statistics available on Education Counts (the Ministry of Education statistical website) do not identify bridging or Level 4 programmes and so cannot be compared.

Significant demographic changes occurring and predicted in Aotearoa New Zealand will impact bridging education both now and in the future. The greatest growth in population over the next decades is anticipated to be amongst those least represented in tertiary education (Anderson, 2001). Increases in the population of Māori, Asian and Pacific Islands peoples have occurred in the last five years (Statistics New Zealand, n.d., b), yet these increases are not proportionally seen in students accessing tertiary education (Ministry of Education, n.d., a). Both Māori and Pacific populations are projected to grow at a faster pace than the total population, with Māori increasing from 15 per cent in 2006 to 17 per cent in 2026 and Pacific population increasing from 7 per cent in 2006 to 10 per cent in 2026 (Statistics New Zealand, n.d., a). Large numbers of Māori and Pacific Islands people lack the necessary qualifications to gain automatic entry to tertiary education in universities (Benseman et al., 2006). While the numbers of Māori people accessing higher levels of tertiary education have significantly increased (due in part to Wānanga) participation by Pacific Island peoples has not (Ministry of Education, n.d., a). The diversity of students entering bridging education is also influenced by immigrants with English as an Additional Language (EAL) seeking to enter tertiary education. The need to understand and address the diverse learning needs of a growing diverse student population is a priority for tertiary institutions to ensure ongoing engagement, retention and completion of students. Successful bridging programmes provide access to the economic and social advantages that higher education can offer non-traditional students, but often the individuals focus is on the disadvantages or costs of tertiary education.

Non-traditional students are more likely to perceive the cost of tertiary education as a discouraging inhibitor and barrier, while experiencing lower levels of encouraging

factors, such as a belief that a university qualification will offer improved and advantageous career options or parental encouragement (James, 2000). Barriers to participation in tertiary study include: access to educational facilities, family responsibilities and experiences, finances (low socio-economic status and the cost of tertiary studies), time, motivation and negative prior educational experiences (Leach & Zepke, 2005; Morris, 1975). Pasifika students experience the tertiary environment as alien and daunting as the "'ways of doing and knowing' in a 'Palangi' world" are different from those in the Pasifika world and many students "operate in dual learning settings" (Cowley, Dabb, & Jones, 2001, p. 40). Student's experiences are unique and how they manage these barriers is also unique. Improving participation in tertiary education is not simply removing or reducing barriers, but requires building encouragement and incentives in communities and families (James, 2000). Support from family, peers, institutional and programme related sources are effective in assisting bridging and non-traditional students overcome barriers (Harford, 2002). James (2000) also notes that the university culture must be demystified and opportunities to gain familiarity are given to both students and their families for first generation entrants.

The need to understand and address the diverse learning needs of an increasingly diverse student population is a priority for tertiary institutions to ensure ongoing retention and completion of students. Zepke and Leach (2005) noted two main themes in their synthesis of literature in the way institutions work with the increasingly diverse range of students. Predominantly, students are required to fit in to the existing culture of the institution, while the other, seeks to adapt institutional culture to better fit the needs of increasingly diverse students, challenging the dominant discourse, is emerging. Bridging education is formed on beliefs that conformity to educational culture should never be at the expense of an individual's culture, class or gender (Anderson, 2001). The importance of the first year in tertiary study is recognised by many researchers and bridging educators (see for example, Anderson, 2007; Andrews, 2005; Harford, 2002; Mabbett et al., 2005; Walters & Foreman, 2005; Waters, 2003; Watson et al., 2004). The transition to tertiary study requires students to adjust, integrate and become involved with a new and diverse learning community (Coutts, 2006).

Transition Into and Through University

All students, but particularly non-traditional students experience challenges in the transition into and through university. Student experiences are significant to outcomes and certain experiences attract students with certain dispositions or traits (Prebble et al.,

2004). Anderson (2003) suggests there are eight stages in the 'student cycle'. They are first, the 'impetus to study' which comes from within. Secondly, 'connection with the provider' where information is accessed, then 'first days' where accurate placement occurs through advisory and diagnostic services. Fourth, 'the teaching/learning experience' and fifth, 'Assessment'. Step six is 'destination programme', seven, 'destination career' and the final step is 'loan repayment'. Effective bridging requires management and support through the first six stages of this process. Other literature (including several large reviews) also outline effective programme features (Boylan & Saxon, n.d.; Gerlaugh, Thompson, Boyle, & Davis, 2007; James, 2000; Prebble et al., 2004). Anderson's (2003) stages and other elements will be used to guide discussion here, although some areas will be discussed more fully in the following chapter.

Impetus to study and connection with the provider

Leach and Zepke (2005) noted decision-making to enter tertiary study was most influenced by socio-economic class and membership of 'at risk' groups, age and ethnicity had some influence, while gender had little effect. The desire to gain a tertiary education is soon followed by seeking to connect with a tertiary institution. The initial challenges for prospective bridging students include: finding information, the application process, confidence or lack thereof, some student's inability to choose an appropriate course, issues related to information technology and many appear to be inadequately informed (James 2000). Pasifika students identified a lack of usable information from the TEI's as a factor of poor recruitment, while peers and mentors provided usable information (Anae, Anderson, Benseman, & Coxon, 2002). McKegg (2003) also noted that community networks were effective forms of recruitment for bridging programmes in Wānanga.

Silburn (2005) advocates for improved information for students and parents of the most at risk groups considering university study while still in secondary school. Opportunities to experience the types of learning that will occur can open windows of opportunity. She also asserts that these opportunities would allow prospective students to gain better information about the university, its courses and what it offers, which may ensure more appropriate course selection on enrollment. First impressions and initial experiences often linger in the mind, as may early experiences of staff at TEI's. Staff who are warm, genuine, show interest and answer questions knowledgably, guiding the student through the daunting enrollment process are vital (McClenney & Greene, 2005).

First days

Anderson (2002) states bridging education programmes need to provide a variety of courses to meet a range of identified learning needs, activities and support services based on a bridging philosophy. Trewartha (2001) asserts that bridging programmes only have a positive effect on student success and retention if they are directly related to the identified, programme specific needs of particular student groups. However, some TEI's have bridging programmes at only one level. Pre-selection and testing of prospective students is an important though contentious issue. Some bridging programmes require prospective students to complete a placement test to ensure they are best placed prior to commencement, while other programmes have open entry (Harford, Bellingham, & Romantan, 2005; Trewartha, 1999). A study of 116 colleges and universities in America found that 92.4 per cent had mandatory assessment (Gerlaugh, et al., 2007); rates for New Zealand are unknown. The diversity of students entering bridging programmes necessitates the use of assessment tools such as the SOLO (Structure of Observed Learning Outcomes) taxonomy, developed by Biggs and Collis (1982) to maximise the learning opportunities (Harford et al., 2005). Dependant on the TEI, testing can ensure the student is placed in the most appropriate level (Anderson, 2007). Where the programme is set at only one level, testing can ensure the students learning is supported by additional resources (Harford et al., 2005) and individual programming (Boylan & Bliss, 1997; Boylan & Saxon, n.d.).

Positive initial experiences within the institution can lead to productive engagement and connections (Anderson, 2007; Boylan & Bliss, 1997; Boylan & Saxon, n.d.). The knowledge and skills bridging programmes facilitate is not solely an academic process. A personal, friendly and informative orientation which links the student to their future aspirations is most effective and provides the student with a glimpse of the ethos and intentions of the programme (Silburn, 2005). It is advantageous when the bridging programme occurs at the university in which undergraduate study will occur (Boylan & Saxon, n.d.; Silburn, 2005) as students are able to orientate to the environment, physically and academically, and begin to acclimatise to the tertiary culture.

Silburn (2005) claims that from enrollment, through orientation and into the first semester "effective induction into the university acknowledges the journey that is about to take place and makes explicit the changes that students will encounter" (p. 101). This enables students to give meaning to the transition processes and assist them with the many changes. This is particularly important for non-traditional and first generation

students. The extent to which students exploit the experiences available in tertiary education is a large determinant of its impact (Prebble et al., 2004). Understanding the facilities the TEI has to offer is a first step in being able to use and exploit them. Tinto (1993) suggests where institutions successfully integrate students socially and academically into their prevailing cultures, retention improves. In New Zealand, many institutions attempt to recognise, value and accept students diverse cultural capital by adapting their cultures to meet diverse student needs (Zepke & Leach, 2006).

The teaching/learning experience

The single most important factor in the teaching and learning environment is the educator (Anderson, 2002, 2007; Benseman et al., 2005). Educators must be culturally and professionally aware and trained to support and develop the potential of the diverse and multicultural range of bridging students in Aotearoa New Zealand (Anae et al., 2002; Benseman & Russ, 2001). The extent of student engagement in academic work corresponds with their level of cognitive development and knowledge acquisition both at programme level and by educators (Prebble et al., 2004). Aspects related to the bridging educator will be more fully discussed in the next chapter.

Following commencement, the challenges students face include: adaption to a new culture, moving to a largely unknown environment, academic challenges, possible family and employment demands, as well as developing new relationships and social skills (Silburn, 2005). Students transitioning to tertiary education come with beliefs, experiences and expectations derived from past experiences. Cantwell and Mulhearn (1997) suggest that mature aged bridging students enter university study with often quite naive understandings of its nature. Some school leavers experience difficulty in the transition to university study due to personal, social and educational challenges (Collinson & Drayton, 2002; Piercy, 2001) (discussed in Chapter 3). Coutts (2006) also notes that early school leavers entering bridging programmes have difficulties making a smooth transition to tertiary study, persisting with study and achieving success although they may be capable. This may be due to unresolved problems experienced during secondary schooling, including personal problems, lack of engagement, low self esteem and lack of confidence. Learning communities and pastoral care are an effective way to mediate some of these challenges (Anderson, 2007) (both are discussed in chapter 3).

While aspects of the background and social context of students are beyond the control of institutions and educators, they are influential and must be considered in the transition and bridging process. Learning at secondary school is predominately

interested in conserving and reproducing knowledge with limited analytical thought required, while post secondary and tertiary education seeks to extend knowledge and requires a speculative learning approach (Ballard & Clanchy, 1997). Students transitioning into undergraduate or bridging programmes most often enter a disciplinary context which is embedded within the broader academic context (or TEI).

Each context has a culture of learning in which certain practices and conventions are accepted. Students (regardless of age) must adapt to do well and may need to accept new ways of study and preparation for assignments. Academics, familiar with their own practices and conventions, experience and present these practices as being 'natural', often assuming these conventions to be universally known and believing they should be universally applied (Vandermensbrugghe, 2004). Disciplines and the academics within them are curators of individual bodies of knowledge, with each discipline having its own culture, requirements, social norms and conventions (Burwood, 1999). Participation in learning requires students to become familiar with a particular body of knowledge and "to partake in a rite of passage into a particular disciplinary culture" (Burwood, 1999, p. 447). The processes of transition are mediated by the educators and staff of the institutions and their ability to deconstruct knowledge and discipline related requirements.

Assessment

Participation in education is influenced by course issues such as the curriculum and by assessments (Richardson, 1994). Assessment is an integral part of the learning teaching environment. Assessments can provide feedback to students and information to educators of the learning process (Anderson, 2007). Assessments which are practical and engage students in applying the skills learnt and needed in further study assist students to see their value (Barnett, 2001; Piercy, 2001). Careful programme design ensuring alignment of assessment styles with those in the destination course of study allows bridging students opportunities to prepare and is an effective form of learning support (Anderson, 2007; Boylan & Saxon, n.d.).

Destination programme

Transition from bridging programmes to undergraduate study is a desirable but not a guaranteed outcome of bridging programmes. While bridging programmes facilitate readiness for undergraduate or other tertiary study, they are not effective at preparing all students. The paradox of students who experience success yet are neither retained nor

complete is known to bridging educators (McKegg & Walker, 2006). However, significant numbers of graduates do go on to enroll in and complete undergraduate programmes (Cheong, 2000; Walters & Foreman, 2005).

An AUT University bridging programme appears to have a 50 per cent transition rate into undergraduate study over a two year period (data from a pilot project) (Walters & Foreman, 2005). In contrast, Australian bridging programmes report that 85 per cent (at Murdoch University) and 60 per cent (at Newcastle University) of students transitioned to undergraduate study, and they performed at a much higher standard than did students admitted through other avenues (Cheong, 2000; Silburn, 2005).

Cantwell, Bourke and Archer (1997) studied mature-aged students who entered undergraduate study following completion of a bridging programme, comparing their academic success with traditional-entry students enrolled in the same subjects. Former bridging students matched the performance and attributes of more traditional-entry students, although further research on the same group showed the bridging students had lower achievement than traditional entry students (Cantwell, Archer, & Bourke, 2001). Archer, Cantwell and Bourke (1999) found that achievement in undergraduate study by students who completed a bridging programme did not differ from students who entered through 'normal' pathways. However, their attitudes and confidence were (positively) different. Cantwell et al., (2001) notes that students who did not complete high school, but completed a bridging programme and then entered a degree performed slightly to significantly worse than other students.

A tracking project at AUT University comparing success rates of non-traditional students who completed a bridging programme and entered degree study showed that the results compared favourably with those who gained direct entry to degree study (Walters & Foreman, 2005). Other studies from New Zealand, Australia and the United States (such as Anderson, 2007; Cantwell, 2004; Cantwell, Archer, & Bourke, 2001; Cantwell, Bourke, & Archer, 1997; Gerlaugh, et al., 2007; Harford, 2002) also show that bridging students who go onto further study do as well as their 'traditional' peers.

Entering undergraduate study is not a guarantee of successful completion at that level, but retention of former bridging students in undergraduate study appears to be high (Silburn, 2005). There are many other factors influencing student retention, completion and progression or transition. When trying to measure the success of a programme and/or its participants, it is argued that the purpose of the programme must provide the guide to the appropriate tool (Anderson, 2002; Cantwell & Scevak, 2004). The

measurement of success of a bridging programme designed to prepare students for further study would therefore be the successful completion of study in the destination programme of choice (although this may be a limited view).

Destination career and loan repayment

Bridging education is a pathway to the career of choice, although that path is not often straight or direct. Gee (1998, as cited in Anderson, 2007) sees teaching as providing the skills of participating by drawing similarities, differences and parallels between present and future understandings. This includes understandings of the social and economic transitions which are vital to the student's management of choice. Anderson (2007) notes that a Manukau tracking project found former bridging students results on the degree programme and subsequent employment rates were equivalent to the cohort. She also notes that international studies agree with this finding. Following completion of study, employment is influenced by factors related to the institutions 'reputation' and 'brand' (Prebble et al., 2004), and this may also influence salary and economic factors which will influence (amongst other things) loan repayment.

Factors influencing transition and completion

Improving student outcomes, like retention in post-compulsory education, has become a focus for policy makers and researchers throughout the western world where governments, including New Zealand's, expect improved learner outcomes for money spent (Zepke & Leach, 2006). Findings from international literature suggest ways to engender student success, for example: making sure learners enroll in courses that are right for them, that they are properly orientated to the social and academic opportunities on offer, that teachers are student centered and available beyond the classroom, that workloads are reasonable, that learning support services are available, that discrimination is absent and that the cultural environment recognizes the diverse needs of class and ethnic background, age and gender, ability and location (Zepke & Leach, 2005).

Achievement at secondary school and achievement in tertiary education are closely linked (Leach & Zepke, 2005; Scott, 2008; Ussher, 2008). Scott (2008) noted that first-year tertiary students were more likely to pass all their undergraduate courses if they had succeeded in Level 3 NCEA results gaining university entrance, were full-time full-year students and also dependant on their field of study (health, education, creative arts students more likely to pass than business, engineering and science students). Attrition

was more prevalent amongst students with poor school results and those in part time study (Scott, 2008). These students would have benefitted from opportunities to first enter bridging programmes.

While retention, completion and progression (stated outcomes of the TES 2007-2012) are important, attrition, non-completion and non-progression are prevalent. At the end of 2002, only 30 per cent of students successfully completed certificates, 32 per cent completed diplomas, while 46 per cent completed degrees over a five year period (Scott, 2004). Scott states that in 2002 only 17 per cent of students progressed from certificates to higher level study, however, the rate of progression in universities was 32 per cent. "Fair international comparisons are problematic because of the significant education system differences" (Scott, 2004, p. 10) and there are no statistics that compare NQF Levels 1-4 internationally. More recent statistics comparing providers show universities consistently have high rates for direct progression by qualification level. In 2005 (the most recent data available), 52 per cent of Level 4 university students were enrolled at a higher level in the following year (compared to 20 per cent of Level 4 Institute of Technology or Polytechnic students and 29 per cent of Level 4 students from former Colleges of Education) (Education Counts, n.d.).

This would appear to indicate that New Zealand bridging programmes are largely unsuccessful; however, these statistics do not indicate the full picture. In total, 42 per cent of Level 4 students starting a qualification in 2002 completed a qualification at the same level by the end of 2006 compared to 48 per cent of students in Level 7 bachelor's degrees (Education Counts, n.d.). While the data does not identify the progression rates of students who completed certificates and then completed Level 7 bachelor's degrees, the rates of completion are similar. Focusing solely on completion is a limited measure of success as it primarily focuses on academia or the cognitive domain and does not take into account the many barriers non-traditional students experience or their goals of education. Bridging educators recognise that students are complete human beings and a more holistic focus is required (Trewartha, 2001). Morgan (2004) asserts that the social and emotional domains are just as important, and students self-concepts, their attitudes towards learning, their motivation and confidence are as important to their success as is the acquisition of academic skills and content knowledge.

Students who enter foundation and bridging programmes (NQF Levels 1-4) are faced with significant issues and a significant number of students leave prior to completion of study at certificate level. This may be due to gaining access to degree level prior to

completion, the current job market and low unemployment, or for many other personal or academic reasons. Internationally, university failure rates are high and graduation rates are low (Watson et al., 2004). Financial barriers are one of the main factors causing students to withdraw from their chosen programme (Glackin & Glackin, 1998). Oesterreich (2000) states "socioeconomic status is the greatest determinant of enrollment and persistence in college for all students" (p. 4). Financial support is a significant factor in overseas research; however, the New Zealand student loan scheme may mitigate some stress initially as access to funds is readily available. It is clear that completion and progression rates do not clearly represent the entire picture. The retention and engagement of students is vital to ensure completion of the course of study, progression into further study and that non-traditional students are not further marginalised by student debt and (possibly further) academic failure.

The experiences of students directly influence their learning (Cantwell & Scevak, 2004). Students who have a clear understanding of what learning entails and where it can lead them are better prepared. Cantwell and Scevak (2004) cite several studies that show non-traditional mature students who enter university via an enabling (bridging) programme are successful in further undergraduate study. Explicit orientation to university studies, both epistemologically and culturally, significantly improves their undergraduate performance. Cantwell (2004) also suggests that students who have progressed to undergraduate study from a bridging course have a clear advantage with successful outcomes in both academic and affective areas. His research into bridging programmes is extensive and shows that as well as gaining content knowledge students develop new ways of thinking about learning and about themselves. This reflects both a quantitative change (knowing more) and a qualitative change (knowing differently). The change influences cognitive, metacognitive and affective domains. The ways in which bridging programmes continue to influence students in undergraduate study is unclear in the literature. The positive outcomes of bridging programmes are indicative of the philosophies which underpin the range of bridging pedagogy.

A Philosophical Basis for Bridging Education

All adult educators have an educational philosophy which is embedded in both what is believed about learning and teaching, and what is done in practice whether or not it can be articulated well (Tisdell & Taylor, 1999). Western knowledge and philosophies dominate higher education and research in New Zealand (and elsewhere), underpinned by western values, belief systems and epistemologies (Anae, Coxon, Mara, Wendt-

Samu, & Finau, 2001). While there may be philosophical commonalities, each educator brings a unique and distinct world-view to their teaching. Tisdell and Taylor (1999) suggest (and I would concur) that educational literature does not coherently and consistently agree on the organisation of educational philosophies. The political structures, economic systems and educational philosophies of individuals and groups influencing bridging education vary as widely as the settings within which it occurs.

Current educational philosophies include: positivism; post positivism; constructionism, subjectivism; humanist (such as Knowles, 1980); critical-humanist (such as Mezirow, 1991, 2000); critical-emancipatory (such as Freire, 1972, 1994); feminist-humanist (such as Belenky, Clinchy, Goldberger, & Tarule, 1986); or feminist-emancipatory (such as hooks, 1994); Māori and Pasifika (such as Baba, Mÿhina, Williams & Nabobo-Baba, 2004; Bishop & Glynn, 1999; Mutch, 2005, 2006); and many others (Anae et al., 2001; Crotty, 1998; Tisdell & Taylor, 1999). The philosophical perspectives underpinning bridging education are just as varied.

While it is acknowledged that several paradigms can exist at any time, they have differing assumptions so are mutually incompatible and therefore, one will be dominate (Foley, 2000). The philosophical perspectives in which bridging education is located is not clear in New Zealand literature due perhaps to the ad hoc way in which the sector developed (Benseman et al., 2005). However, it can be aligned with aspects of the critical paradigm (particularly in the case under study) (Harford, V., programme leader, personal communication, March 4, 2008), transformative learning and adult learning theories (Danaher et al., 2006). Trewartha (1999) argues that when bridging programmes accept students, bridging educators have a responsibility to ensure that education is a liberating rather than oppressive process. The social and cultural contexts within which individuals understandings are shaped are significant factors in the construction of meaning. It is the social context, ideology and issues of knowledge and power that are the focus of the critical paradigm and critical theory (Foley, 2000).

Critical theory

Critical theory is a concept that represents a number of theories that challenge the status quo. From the 'new' social movements of the 1960s and 1970s critical pedagogy emerged in several forms including Paulo Freire's (1972) 'Pedagogy of the Oppressed' and bell hooks' (1994) 'Revolutionary Feminist Pedagogy', and is widely influential (Roberts, 1994). Critical theorists' interest and focus is on how power structures within classrooms echo and reinforce the social structure which traditionally privileged white

middle class men, and that adult educators should be fully conversant with the socio-cultural context in which their students conduct their lives. Critical pedagogy includes approaches concerned with the connections among adult education, social reproduction and social transformation and 'radical adult education', 'emancipatory education', 'transformative education', liberatory education, and 'participatory education (Crotty, 1998; Foley, 2000; Schugurensky, 2000). The common focus is on the shift in power from teacher, to teacher and student together. Schugurensky (2000) asserts that while the different names used may show the focus of the social action they are all characterised by common traits including a rejection of the neutrality of adult education; an explicit political commitment to work with the poor and the marginalised to foster social and economic change; a focus on the collective; and attempts to relate education with social action. Student-centered learning, the negotiated curriculum, transformative education and other elements of current curriculum have their origins in critical pedagogy.

"Educators must be aware of the politics of knowledge production and dissemination: what counts as knowledge, who is involved in its production, and their relative positions in the power structure are determinants of curricular and instructional decisions" (Tisdell, 1995, p. 9). Critical theory seeks to emancipate learners from the repressive characteristics of educational systems based on ideas of centre, margin, hierarchy and linearity (Crotty, 1998). Habermas asserts that the structure and culture of the institutions within which individuals live, learn and work shape their understandings (Foley, 2000). Habermas argues that rational autonomy and freedom are a basic human interest, which he calls an emancipatory-knowledge interest (Carr & Kemmis, 1986; Foley, 2000). Issues such as structural privilege and oppression, particularly the power dynamics based on intersections of gender, class and race determining whose ideas are valued, who speaks and who remains silent in the classroom (Carr & Kemmis, 1986; Foley, 2000; Tisdell, 1995) are factors that have impacted on students entering bridging education. The work of Paulo Freire has particular resonance to bridging education programmes according to Coltman (2004).

Freire (1972) asserted that the pre condition for emancipatory pedagogy is subject-object dichotomy and the possibility of knowing 'the reality' of the oppression. Freire believes in objectivity and calls for education where the genuine humanist educator and revolutionary challenge hegemonic education (the discourse of white authority) and its context. He challenged concepts of knowledge and a canon which is enforced on

students by a predetermined set of books and hierarchical relationships with the teacher as the one who knows (Gur-Ze'ev, 2000). The ways in which education occurs and the specific learning activities conducted are as important as that which is being taught, though often it is less conscious or overt, 'the hidden curriculum' (McCutcheon, 1998, as cited in Tisdell, 1995).

Pedagogy and curriculum are inextricably intertwined, ongoing and mutually influencing. Committed to education as liberatory practice, Freire's seminal work 'Pedagogy of the Oppressed' (Freire, 1972) emphasises the need to provide native populations with education that is relevant to their needs, emancipatory and anti-colonial. He asserts that education should cause social change and the empowerment of oppressed groups. Therefore educators must take into account the structural systems of privilege and oppression (based on race, gender and class). Freire also asserts that it is mankind's ontological vocation to act upon and transform his or her world and thus move toward ever new possibilities of a richer and fuller life individually and collectively. These are the core attributes of many bridging educators pedagogy.

Freire (1972, 1994) highlighted the contrasts between education forms that treat people as objects rather than subjects and explored education as cultural action. Introducing the concept of 'banking education', he was critical of the transmission of mere facts as the goal of education (as were other educators such as John Dewey) and the way the student was viewed as an empty account to be filled by the teacher (Freire, 1972; Spener, 1992) Freire opposed the teacher-student dichotomy suggesting a deep reciprocity or horizontal student-teacher relationship, that is, a teacher who learns and a student who teaches (Freire, 1972; Spener, 1992; Taylor, 2000). Students contribute to the learning environment just as the teacher does. He asserts that emancipation through interactive participation leads to empowerment and transformation of poor or marginalised groups.

With the proper tools individuals can gradually perceive personal and social reality and the contradictions in it, becoming conscious of their own perception of that reality, and deal critically with it, which Freire terms 'conscientization' (Freire, 1972, 1994; Spener, 1992; Taylor & Bedard, 1992). The future is built in the present and change is fashioned through becoming aware, critically moving back and forth between reflecting and acting on the world (which Freire entitled 'praxis') (Freire, 1972, 1994). The more critically aware learners become, the more they are able to transform society and subsequently their own reality, and thus, a rediscovery of power occurs. For bridging educators this requires an awareness of the complex issues related to the diverse cultural, social and

economic realities of their students. In contending with these issues an inclusive learning environment must be created (Boylan & Bliss, 1997).

Freire (1994) identifies events and actions are multi-faceted suggesting they are "wrapped in thick layers", having been "touched by manifold whys" (p. 16). He believes it is more important to understanding the process (through praxis) than the product. He indicates that remote tapestries of experiences from childhood onward are foundational, suggesting the use of the past that influences the present as a way to move forward. Freirean education is a mutual process of reflecting upon and developing insights into the students evolving culture, which includes how people work, create and make life choices. It is not a static set of social attitudes, religious beliefs, customs, forms of address, attire and foods; "rather, it is a dynamic process of transformation and change laden with conflicts to resolve and choices to be made both individually and as a community" (Spener, 1992, p. 1). He highlights the importance of the democratization of schools and ongoing training of all those involved in any way with education (including service workers). Freire believes that the act of transforming an individual, transforms society (Taylor, 2000). As bridging educators become critically aware and act, they free themselves and then can assist others in the process of conscientization, becoming free from the contradictions of the education system and agents of transformation.

Transformative education

While students have a range of educational experiences, they may come to tertiary study with no or limited history in the subject matter and presenting new information is not a guarantee of optimal learning. Students are not always ready to recognise the limitations of their current knowledge and perspectives, and a transformation is required (McGonigal, 2005). Mezirow (1996a; 2000) proposes that transformative education (a facet of critical theory) is a process of becoming meaningfully changed in some way by the learning and is beyond gaining factual knowledge. Like Freire, he challenged the traditional western worldviews and behaviour, offering a potential alternative for individual and social transformation. Children and adolescents often accept viewpoints and ideas passively and uncritically from a range of authority sources, and internalise these beliefs. Mezirow (1991, 2000) suggests perspective transformation (similar to conscientisation) involves questioning assumptions, beliefs, values and considering multiple points of view, while always seeking to verify reasoning. He states:

Perspective transformation is the process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world; changing these structures of habitual expectation to make possible a more inclusive, discriminating, and integrating perspective; and, finally, making choices or otherwise acting upon these new understandings. (Mezirow, 1991, p. 167)

Transformative learning is a rational process occurring within a metacognitive awareness which allows critical thinking to transform acquired frames of reference or world views (Dirkx & Mezirow, 2006). Mezirow (1996a), like Freire, recognised the possible role of personal and social factors, situation, power and non-rationality in learning and transformation, and that through a process of critical reflection, individuals can be transformed. Mezirow believes catalysts for transformation are 'disorienting dilemmas', situations which do not fit one's preconceived notions. These dilemmas prompt critical reflection and the development of new ways of interpreting experiences, as beliefs, attitudes, opinions, and emotional reactions are impacted and changed. Mezirow believes the ultimate aim of education is "the development of consciousness, awareness and control of one's thoughts" (Dirkx & Mezirow, 2006, p. 134).

Through dialogue, an open-ended energetic exchange between a teacher and student(s), deeper and reflective learning occurs (Mezirow, 1996b). Transformative learning involves becoming more reflective and critical, open to the perspectives of others, being less defensive and more accepting of new ideas (Mezirow, 1996b, 2000; Spener, 1992). This occurs through opportunities to actively participate in deliberation and decision making, and as learners engage with their thoughts, values and beliefs. Transformative learning can be incremental and/or sudden and may involve subjective or objective reframing (Dirkx & Mezirow, 2006; Schugurensky, 2000). Mezirow (2006) believes that transformation can occur alone, however, often requires the support of others, particularly when anxiety is present. Educators must strike a balance between support and the challenges they provide (McGonigal, 2005). Transformative learning includes approaches which highlight integrative, holistic understandings of learning (Gunnlaugson, 2005; Illeris, 2002).

Bronfenbrenner's bioecological theory

All development occurs within a social context, the individual is an inseparable part interacting with the environment. Bronfenbrenner's (1981, 2005) bioecological theory highlights the person/context relationship. Bronfenbrenner acknowledges that individuals do not develop in isolation, but in relation to their family and home, school,

community and the broader society. He states that development occurs through interaction between the developing persona and five surrounding, interlocking contextual systems of influences which either support or stifle growth (see Figure 2.1). The dynamic, developmental interactions between the individual and their complex, integrated and changing environment are the focus of his theory. The innate character of the individual and each of the ever-changing and multilevel environments, as well as interactions among these environments, are significant to development.
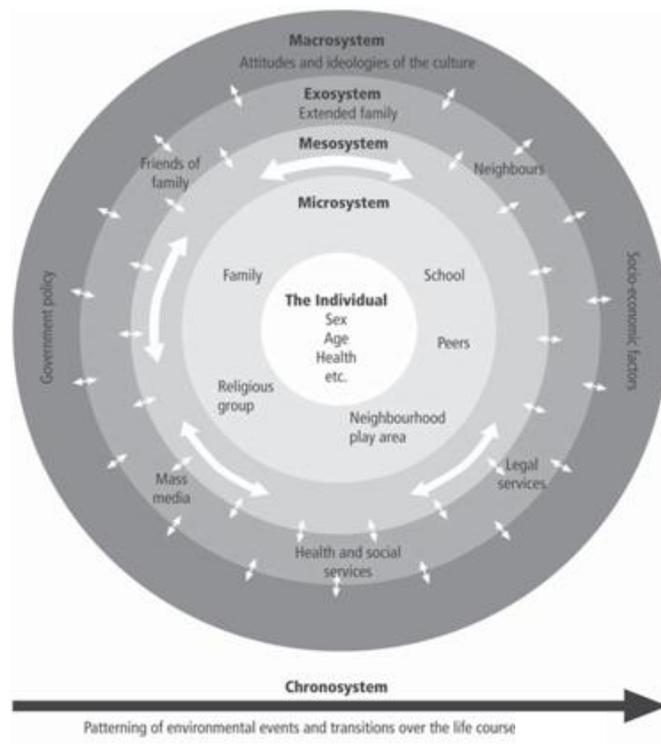
Figure 2.1: Urie Bronfenbrenner's Bioecological model
(Source: adapted from Papalia, Olds, & Feldman, 2004, p. 42).

Bronfenbrenner's (1981, 2005) bioecological theory shows links between the individuals and the myriad of influences on development. The individual is at the core of the system with all their innate characteristics. Influence in one area affects other areas of the individual's life. The learning teaching exchange is holistic and influential (Taylor, 2000). This holistic view of development must be considered as students enter the tertiary environment. "Holistic and transformative educational processes attend to the fullest development of learners" (Giles & Alderson, 2004, p. 64), including knowledge, understandings, skills and character. As educators, we are able to interact with the individual within the educational environment. This has the potential to initiate vast and far reaching changes as students complete bridging programmes, go on to accomplish their goals, and interact with other in their social circles.

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Concluding Comments

Tertiary education in Aotearoa New Zealand is well structured and supported by government policy and practice aimed at supporting lifelong learning and the development of a robust learning society based in a knowledge economy. The market driven education of the nineties with student fees, student loans and competition between institutions has been to the detriment of some students, including many non-traditional tertiary students. Growing populations of people not traditionally engaged in tertiary education and political forces have seen a focus on foundation learning in recent tertiary education reforms.

Bridging programmes, a subset of foundation learning, are effective in ensuring under prepared and ineligible students are prepared for further study at higher levels, so that they can access the benefits of the knowledge society. Strong shared commitment to equity in education as a civic and human right for socially and economically underprivileged groups is a facet of bridging education. Completion of bridging education and the transition of students through the tertiary system is seen as an important contributing factor to personal, social and economic transformation.

Bridging programmes are informed by a number of philosophical bases including critical and transformational perspectives. Bridging learning is often focused on perceiving and exposing contradictions, and then equipping students to act to liberate themselves from those contradictions. Transformative learning occurs when taken for granted beliefs are reflected on and perspectives and ways of seeing the world are transformed. This enables the individual to be free from limitations or overcome negative perceptions of learning and education. Building on these factors, the next chapter will further discuss a range of aspects which are influential in bridging education.

Chapter 3: Literature Review: Influences of Bridging Education

> The breadth of "literature" grows the review no end it seems. Two primary supervisors and their various strengths led to the overwhelming need for two chapters. The initial research defined a gap in knowledge and the number of major scholarly sources relevant to the issue of holistic influence that will provide the context is vast, more than anticipated. The NZABE proceedings are a mine of information, both in their own right and a source for further reading. Organising and combining to summarise and synthesise feels it is becoming my life's work! (Personal research journal entry, November 22, 2007)

Overview

Bridging programmes have been an important part of the Aotearoa New Zealand tertiary education environment for over 30 years. The characteristics of bridging students and their progression through tertiary study, and some underpinning philosophies of bridging were also discussed in the previous chapter. This chapter highlighted the range of factors influencing bridging education and bridging students in addition to those previously discussed. These include: institutions; bridging educators and aspects of pedagogy. As the tertiary education years are a period of sustained and widespread development and change cognitively, psychosocially, attitudinally and morally for students (Prebble et al., 2004), the academic, psychological and social factors influencing bridging students will also be discussed. The chapter is concluded with the context of the current study discussed in light of the range of literature reviewed.

Influences on Bridging Students

Many non-traditional students enter bridging programmes as a mode to prepare for undergraduate study (Cantwell, 2004). These programmes are designed to meet the needs of students who do not have the educational criteria or skills to enter university (Cantwell & Mulhearn, 1997; Giles & Alderson, 2004; Richardson, 1994). They may last a few weeks, to a year, with some specifically focusing on entry to specific programmes (Blaxter et al., 1996). Focusing on process rather than content, bridging programmes promote learning that encourages a search for relationships and meanings in the study material (Hayes et al., 1997).

Bridging programmes aim to assist students by providing: a thorough subject based academic grounding; opportunities for the development of academic study skills and personal management skills; a supportive environment that encourages and promotes the students independence and confidence; and a programme based on bridging pedagogy (Trewartha, 2002). Individuals learn holistically, developing as integrated

physical, cognitive, emotional, psychological, relational, social, cultural, political and spiritual beings (Hamil, 2002). A range of factors have been attributed to the influence of bridging programmes by researchers and authors (for example: Anderson, 2007; Cantwell, 2004; Cantwell et al., 1997; Cantwell & Grayson, 2002; Harford, 2002; Ramsay, 2004; Silburn, 2005; Trewartha, 2001), including personal, academic, cultural and social factors. The influences can be singular or multilayered, but each has importance contributing to the success or failure of the student in education.

Institutions and Programmes

Institutions within which bridging programmes are situated have a vital role in policy and culture formation. According to Benseman and Russ (2001) fewer than 60 per cent of institutions had policy on bridging programmes although they offered them. Anderson (2001) notes that an institution wide, integrated strategy will ensure the maximum bridging education benefit. This will ensure skills and resources are available and not duplicated, provide students with clear pathways across the institution and make it possible to collaborate with other institutions in coherent and mutually beneficial ways. This is also supported by literature from a range of sources (Boylan & Saxon, n.d.; Prebble et al., 2004). However, as Duke (2002) noted, this is not common in Aotearoa New Zealand.

Boylan and Saxon (n.d.) reviewed thirty years of research on effective practices in working with underprepared students in bridging type programmes. Prebble et al., (2004) also completed a synthesis of research supporting many of Boylan and Saxon's (n.d.) findings. Identified were a range of techniques, models or structures that contribute to improved student success, many of which were discussed in the previous chapter. Those that relate to the institution and educators and their practice, briefly stated, are as follows. The establishment of: an institution-wide commitment to remediation; a strong philosophy of learning to develop programme goals and objectives and to deliver programme services; clearly specified goals and objectives for developmental programmes and courses. The provision of: a centralised or highly coordinated remedial programme; a high degree of structure in remedial courses; a counselling component integrated into the structure of remedial education; staff training and professional development for those who work with underprepared students; ongoing student orientation courses; and the assurance of consistency between exit standards for remedial courses and entry standards for the regular curriculum. The following factors relate to the educator and their practice: the application of sound cognitive theory in the

design and delivery of the course; the provision of tutoring performed by well-trained tutors; the use of formative evaluation to guide program development and improvement; the implementation of mandatory pre-assessment and placement at the appropriate level. Also indicated were the use of: mastery learning techniques; a variety of approaches and methods in instruction; learning communities; and supplemental instruction to support learning; the integration of classroom and laboratory/technology activities; the provision of courses or workshops on strategic thinking; and integration of critical thinking into the curriculum. Anderson (2001) believes that students enrolling in bridging programmes have the motivation and desire to participate in tertiary education. It is the difficult task of bridging education programmes and educators to enable students to acquire the appropriate skill base to build enough self confidence to continue in study and to gain access to the programmes of their choice.

Educators

No engagement with others is neutral, but is value-laden. "Consciously, we teach what we know; unconsciously, we teach who we are" (Hamachek, 1999, p. 209). Bridging pedagogy is developed and integrated through engagement with theory, establishment of models, identification and response to context and the growth of personal judgment (Anderson, 2002). The underlying philosophical perspectives and orientation of academics and institutions towards students significantly influences the approaches used in teaching and students interactions.

Philosophical considerations

Bridging educators often choose to work in this field as they are committed to working with students whom the school system has failed and to providing a safe, supportive learning environment in which they can succeed (Morgan, 2004; Trewartha, 2001). Both Freire (1972, 1994) and Mezirow (1991, 2000) believed the role of educators is to help learners: focus on and examine underlying assumptions that inform beliefs, feelings and actions; assess the consequences of these assumptions; identify and explore alternatives; and engage in reflective dialog. Bridging educators play a significant role in meeting the academic, emotional and social needs of students (Morgan, 2004). Trewartha (2001) believes that "working with non-traditional students requires teachers to confront their own beliefs about how students should study and how they, as teachers, deal with student problems in relation to their own world beliefs" (p. 79).

European (and other) bridging educators must challenge the belief of 'one way' or a 'right way' to learn and offer students alternate ways to experience tertiary education (Freire, 1972; Trewartha, 2001). Trewartha (2001) suggested the hegemonic meanings and interests of cultural inheritance (see Gramsci) embedded in some forms of tertiary education need to be revisited and reinterpreted, through the lens of non-traditional students. By listening to their perspectives, cultural values and bias can be identified and changes made to ensure inclusive, enabling forms of education that are intentionally interactive and transformative. The facilitation of learning for the whole person accepts non-traditional ways of knowing and learning and seeks to allow them to integrate into other settings. A measure of the success of a bridging programme according to Anderson (2001) is the degree to which students exiting bridging programmes can act as agents of change, while maintaining a level of conformity that enables them to succeed.

It is (bridging) educators who are self-aware that are more able to work with students in the process of producing understandings of the complexities of knowledge (hooks, 1994). Tickle (1999, as cited in Korthagen, 2004) asserted the interface between person-hood, the educator's personal virtues, and teacher-hood, the professional aspect, needs to be scrutinised. He believed qualities such as empathy, compassion, understanding, tolerance, love and flexibility are necessary attributes as education comes from the teacher as a person. Palmer (1998) considers that good teaching comes from the identity and integrity of the teacher; that they care deeply about their students and their subjects, and so engage and are truly present in the classroom. Through meaningful connections between educators, students and their subject, transformations can occur. Connections occur as educators and students interact in the classroom and with the curricula in meaningful, intentional and engaged ways (Harford, 2002).

Pedagogy and curricula

Anderson (2002) suggests that successful pedagogical models and methods for bridging education need to be identified and developed. Bridging educators have a range of educational and technical skills and there is no standard qualification or training (although qualifications are available) to ensure that they have the knowledge and skills required (Trewartha, 2001). Coltman (2004) compared features of bridging education provision in four polytechnics in Aotearoa New Zealand, and identified diversity in models of delivery, skills and knowledge of staff. The development of professional judgement (a key aspect to the development of bridging pedagogy) requires the educator, as decision-maker, to have growing expertise (Anderson, 2002).

It is essential for staff new to bridging to have adequate training and induction (Burton, Walker, Bellingham, & Walters, 2003). Training and up-skilling occurs on an adhoc basis according to the individual, programme and TEI, and is also facilitated by sector groups such as the New Zealand Association of Bridging Educators (NZABE). The NZABE, convened in 2001 by Dr Helen Anderson (Manukau Institute of Technology) has been instrumental in linking institutions and subsectors, and increasing the professional networking and profile of bridging and foundation learning (Coltman, 2004; Duke, 2002). When a range of effective practices are learnt and implemented within the context of the classroom and programme, then bridging (and all) educators can hope to meet the needs of the diverse student group and bring about liberatory and transformative change.

Coltman (2004) advocated the need for programmes that focus on purpose and product rather than standardised content. Morgan (2004) found a consistent belief amongst bridging educators in the Auckland region, that acquiring academic skills and developing attitudes and beliefs congruent to tertiary study was as one of the primary purposes of bridging programmes. Educators must make explicit the perceived combination of skills, attributes and knowledge students need, and this may vary as much as the number and type of programmes. By describing the attributes of graduates, universities have sought to demonstrate the quality of their outcomes and processes (Barrie, 2006). It is the clear articulation of these attributes or outcomes that enables curriculum to be developed and so, the underlying philosophical basis must also be made explicit. Instructional approaches are not neutral, they must take into account cultural difference and value diversity (Ziegahn, 2001). A range of different teaching strategies can be employed to help students with different needs and backgrounds (Collinson & Drayton, 2002).

The learning/teaching interface

In 2005, Howard Fancy (then the Secretary for Education) stated, "Good teaching is powerful and can offset factors that may contribute to lower achievement. The research is clear - effective teaching is the most powerful influence within the education system that contributes to student success" (Ministry of Education, 2005, p. 5). Active engagement with students through collective and individual interactions is seen as important to bridging educators (Morgan, 2004). It is much easier to alter teaching practices to meet the diverse needs of students than to change the family and community as a way to raise achievement. Effective teaching is defined as focusing on maximising

the learning outcomes for all students in every situation, supported by quality providers and the involvement of families; and requires knowledge of the subject, effective teaching practice and the students (Ministry of Education, 2005). Warm reciprocal relationships between educators and students need to be developed to reduce the alienation students (particularly bridging and non-traditional) experience (Anderson, et al., 2004; Giles, 2004; Giles & Alderson, 2004).

Student's social, cognitive and emotional experiences when triangulated provide both interest and challenges for bridging educators (Collinson & Drayton, 2002). Often these factors cause the assessed outcomes to be very different than what is expected. The interface of learning and teaching is crucial in meeting the diverse needs of bridging students. Contextualising adult learning theories within bridging programmes is challenging as none appears to contain the absolute essence of the diversity of bridging students. Foley (2000) notes that the varied life experiences and understandings of educators and students is such that there can be no single body of knowledge that is appropriate to all. However, contextualising individual learning within a broader and validated social environment is applicable to bridging (Morgan, 2006). Both Illeris (2002) and Cantwell (2003) provide theory discussing the interactive nature of learning and the importance of both internal and external dimensions in the learning process.

Illeris's (2002) 'Contemporary Learning Theory' views successful learning as intellectual advancement, cultural progression and cognitive enlightenment. The premise is that human learning is comprised of an interaction between cognitive, emotional and social dimensions, in two integrating processes that occur simultaneously. An interaction of social, emotional and cognitive dimensions must be recognised and validated by both educators and students for learning to occur. Emphasising the essential interaction between an individual and their surroundings, Illeris concludes that learning is a social process.

Cantwell (2003) described a similar process in his 'Multi Component Model of Student Learning', in which metacognitive processes (efficacy level, dispositional level, regulative level) interweave with cognitive processes (operative level). Socio-cultural factors impacting student learning are implicit within the model. Cantwell asserts that the metacognitive level, descriptive of students constructions about knowledge and knowing, is the basis on which the cognitive level, that is a description of real time activity, occurs. To engage meaningfully in cognitive 'operative' learning (what I am doing), the use of memory is required, however, anxiety levels play a significant role in

accessing and laying down new memory. The metacognitive processes underlying learning activity are often habitual and automated and for non-traditional students, often flawed. At a 'regulative level' (what I think I am doing), the process of sifting and selective regulation of cognitive activity occurs. However, if the student is unaware of alternate processes, the strategies employed could be flawed. The 'dispositional level' (why I think I should do this) is a product of learned responses, reflection and/or conditioning. Cantwell (2003) identifies "the increasing important role of socio-cultural knowledge as a determinant of the form and direction of learning behaviour" (p. 9). The affective challenges of learning are found in the 'efficacy level' (do I think I can do this) which according to some theorists (such as Bandura), "is the most powerful predictor of academic performance" (Cantwell, 2003, p. 12).

Educators may require a paradigm shift from providing instruction to producing learning (Barr & Tagg, 1995). Programme design reflects the philosophy and pedagogy of educators, although Morgan (2004) notes the bridging educators in her study were "generally vague as to the theoretical orientation underpinning their practice" (p. 25). Educators who experience and understand their subject matter in a more integrated and holistic way, experience their teaching in more conceptual change and student-focused ways (Prosser, Martin, Trigwell, Ramsden, & Lueckenhausen, 2005).

The process of offering students a demystification and familiarity with a particular body of knowledge and the institution is imperative to bridging educators (Burwood, 1999; Morgan, 2003). As stated in Chapter 2, educators are curators of knowledge, a culture of learning, social norms and conventions, which they experience and present as being 'natural', often assume them to be universally known and applied (Burwood, 1999; Vandermensbrugghe, 2004). Burwood (1999) suggested that in undergraduate programmes new ways of study and preparation for assignments are often not made explicit, yet students are expected to adapt to do well. Non-traditional students and particularly those failed by their schooling, are less able to grasp the unstated assumptions of their educators. How can educators expect students to 'know what they don't know'? Unstated assumptions and expectations need to be made clear. By peeling back the layers of social and intellectual elitism, the mystique and fear of tertiary education is replaced with confidence and a belief of success (Morgan, 2004). Rather than seeking to assimilate or adapt students into the system, bridging educators can provide them with a critical awareness of the system and provide the tools to retain identity and achieve educational success (Anderson, 2001).

Engagement occurs by design between educators, students and the curricula. The creation of a collaborative learning environment, which accommodates and celebrates cultural and individual diversity, that provides prompt feedback on student performance, while supporting individual development is effective in promoting engagement (McClenney & Greene, 2005). A New Zealand bridging programme altered their course content making it goal driven and aligning it with the first year undergraduate papers to ensure it was more meaningful to students (Piercy, 2001). Another redesigned bridging programme aimed to provide learning that was co-operative, collaborative and socially rewarding so students experienced learning as a process of discovery of knowledge and as personally relevant (Barnett, 2001). This required a shift in culture amongst educators where the programme team worked collaboratively and had a clear awareness and understanding of each other and the programme components to allow for integration of collaborative learning and assessments. While not an easy process, Barnett (2001) notes it was beneficial to both staff and students. Moving from theory to practice necessitates awareness of different views of learning, motivation, behaviourism, social cognitive theory, and information processing.

External factors are a significant influence on the learning teaching interface. Students motivations to study, family and societal pressures and other external factors all impact on their balance with learning. The learning environment is an important factor, "when engagement reaches a significant level, structural and personal factors identified as external may have a reduced impact" (Anderson, Stephenson, Millward & Rio, 2004, p. 88). The relationship between the educator and student is important, and a significant factor in the retention of students (at all levels of study). A positive empowering relationship is linked with positive educational outcomes and student success (Anderson, et al., 2004; Cowley et al., 2001; Harford, 2002). The dynamic relationships between teacher and student(s) require an awareness and sensitivity of the many exchanges, both formal and informal, that occur (Palmer, 1998). Educators who are cognisant of both the academic and affective domains are more able to meet the academic (study skills, knowledge and academic support) and emotional (acceptance, empathy) needs of a diverse range of students, enabling them to fully participate in learning (Cowley et al., 2001). Improved student performance has been linked with educators who: articulate high but achievable expectations of students and clear accomplishment goals; and create active learning environments where students work collectively and take ownership of the learning process (McClenney & Greene, 2005).

Educators who engage with students early in the classroom experience on an individual basis, such as using their name and finding out about them as a person, can help make important connections which enable the student to engage in the learning (McClenney & Greene, 2005). Anderson et al., (2004) note that accessibility of lecturers and responses to student questions and feedback (both the timeliness and quality) influence engagement. Maintaining regular contact with students enables progress to be monitored and additional support and encouragement to be given when necessary (Piercy, 2001). This relationship can be built in both formal and informal settings. Students who have frequent contact with their educators both in and out of class during their programme of study have reported being more satisfied with their educational experiences, perceive themselves to have learned more and are less likely to drop out (Cross, 1998).

Skilful teaching requires a consistent awareness of how students are experiencing their learning and perceiving teaching. Brookfield (2006), a leader in the field of adult education and critical theory, suggests it is important that educators acknowledge the complexity of the teaching-learning situation and know that every student's reception, perception and interpretation of the same event are different. Shor (1992) argues that "The first responsibility of critical teachers is to research what students know, speak, experience, and feel, as starting points from which an empowering curriculum is developed" (p. 202). This allows educators to be alert to the learning and teaching dynamics, and to develop students reflective capacities which can engender positive change in the classroom. Brookfield's (2006) 'Critical Incident Questionnaires' are one such method to develop students reflective capacity and gain understanding of the learning and teaching that has occurred, from the students perspective.

Awareness of student needs can mean that "empathy and awareness of the student's needs require the student to be introduced to their culture or to have their cultural ties strengthened" (Skill New Zealand - Pukenga Aotearoa, 2001, p. 54 as cited in Dirks et al., 2006, p. 65). A supportive, challenging and conducive learning environment centred on the students cultural identity assists in enabling them to achieve their maximum potential. Honouring a student's culture in the learning environment instils a sense of identity that contributes to the student's self-awareness and self-worth (Dirks et al., 2006). Gaining shared understandings and developing or restoring the students mana (respect) is critical to success in learning, particularly for Māori (and Pasifika) students.

Pastoral care

Non-traditional students may require greater support both academically and pastorally from both educators and the institution to successfully complete bridging and other qualifications (Dirks, Salter, Curtis, Townsend, & Crengle, 2006; Mabbett et al., 2005). This demands a high level of resourcing. Pastoral care is intrinsic to many bridging programmes and the quality of educator's interactions with students is considered a crucial factor (Dewart, 2003; Harford, 2002; Piercy, 2001; Trewartha, 1999). Follow up that occurs when students begin to lag behind, to assist the student to identify the problem and possible solutions, is most effective (McClenney & Greene, 2005). Maintaining levels of pastoral care is a challenge with increasing class sizes and the increased pressures of fiscal accountability. Bridging educators and student advisors or mentors familiar with institutional knowledge and process, are able to resolve many personal and administrative problems encountered by students when there is supportive and ongoing contact (Dewart, 2003; Harford, Morgan & Watt, 2003; Piercy, 2001).

External factors not directly related to learning and teaching impact on student persistence (Anderson, 2007). Many non-traditional students need encouragement to access and use the available facilities (Dewart, 2003). These include informal academic and social support, as well as services such as counsellors, doctors, and learning specialists within the institution (Anderson, 2007). Students who feel part of a learning community or study group are more resilient in times of difficulty (Anae et al., 2002; Dewart, 2003). Tinto (2004) notes high expectations, academic and social support, frequent feedback monitoring progress, and an involvement in learning communities are crucial for the academic, social and emotional development of students.

Collaborative learning and learning communities

The use of learning communities and collaborative learning opportunities has been growing in tertiary education and in particular bridging programmes. The student's first year experience has the greatest influence on persistence (Johnson, 2000; Yorke & Thomas, 2003). Tinto (1993) proposed that student retention is directly related to how well students are socially and academically integrated into the institution. A student centred approach in all aspects of the learning experience (the institution and educators) can strengthen the student's social integration and persistence. Learning communities offer "a more holistic, integrated learning experience for students" (Cross, 1998, p. 4). They range in from loosely structured student support programmes to highly structured and integrated programmes.

Based on the belief that knowledge is socially constructed, learning communities allow a shared approach, where educators and students work together towards improved learning outcomes (Cross, 1998; Tinto, 2003). Social construction conceives that knowledge is developed as students and educators work interdependently together (rather than a banking education model in an authoritarian structure) fostering active learning (Cross, 1998). Student engagement with educators and other students is a significant factor in continuation (Harford, 2002; Johnson, 2000; Kerka, 1995; Tinto, 1993; Yorke & Thomas, 2003) and is a predictor of success (Kinzie & Kuh, 2004).

Tinto (1997, 1998, 2002, 2003, 2004, n.d.) suggests learning communities allow for shared knowledge, shared knowing and shared responsibility which alters students experiences of the curriculum and learning. The connections that students make with each other provide encouragement and promote participation and engagement, and are often ongoing in the form of self-supporting groups. Tinto also asserts that because of this, students do better socially, academically and personally.

Co-operation in learning can result in students encouraging and facilitating each other's efforts to learn (Johnson, Johnson, & Smith, 1998). When difficulties or disagreements arise in a learning experience, alternate perspectives can be seen and understood, and may cause a degree of perspective transformation and cognitive development to occur (Cross, 1998; Imel, 1991). Interactive workshops in which students work together with academic support on set tasks related to assessments was particularly useful in allowing first year students to realise they had an academic voice (Scott, Jansen, & Vinkenvleugel, 2005). Improved outcomes are apparent for students who are part of learning communities; these include greater engagement in academic and social activities, more positive views, and improved persistence (Anderson, 2007; Anderson, Stephenson, Millward, & Rio, 2004; Cross, 1998; Ramsay, 2004).

There are a variety of classroom contextual variables that can influence student experience and achievement (Anderson, 2004). These factors include the subject matter, variability amongst student ability or prior achievement level and the physical arrangement of the classroom. Bridging students benefit from tuition focused on small group learning which is well supported by peer tutors and educators (Murphy, Cobbin, & Barlow, 1992). Bridging educators believe that small class size enhances learning potential (Morgan, 2004). Small classes are linked to a positive influence on achievement; leads to greater teacher satisfaction and enthusiasm (Anderson, 2004; Burwood, 1999; Harford, 2002); can result in teachers having more knowledge about

their students and may provide students with more individual contact (Anderson, 2004). Bridging programmes in America have an average of 20 to 25 students (Gerlaugh, et al., 2007). The benefits of small classes for students also include increased study skills, literacy, numeracy and the development of a greater sense of self confidence, motivation and achievement (Murphy et al., 1992). In a small co-operative learning environment, educators and students can learn from each other and significant shifts in thinking, skills and behaviour can occur (Danaher et al., 2006). Students are more able to free themselves from the past and move toward a fuller and more engaged learning future in inclusive learning environments (Tisdell, 1995).

Academic Factors

Many students lack the necessary academic skills (Silburn, 2005). If the student is the author, authority and centre of their own knowledge acquisition as bell hooks (1994) suggests, they need to first see their need for new skills and then be equipped. Bridging programmes are an effective means for skill development. The philosophy, content and pedagogy of a programme have the ability to facilitate engagement and the development of greater knowledge and understanding about self as learner. As previously discussed, metacognitive processes interweave with cognitive processes to enable learning (Cantwell, 2003), and both need to be made explicit.

Washer (2007) asserts that there is a shift towards 'best educational practice' which includes experiential education and examining the processes of learning rather than a pure focus on content. Programmes that use study skills tuition, peer tutoring, project learning, individualised programmes and computer based tutorials, increase the student's active engagement in learning which enhances knowledge acquisition (Prebble et al., 2004). Washer (2007) suggests that on completion of a programme, students should be equipped with a range of skills which have been integrated into the curriculum which enhance the individual's skills, knowledge and to some extent, their lives. He asserts that students entering university should be able to: work with others; problem-solve; use information technology; learn how to learn; and have a range of communication; numeracy; and personal and professional development skills. Learning styles and temperaments, self management skills, and resources are tools which the student can access and apply in a range of settings. In gaining this knowledge and understanding about themselves, the student is able to apply that knowledge to others, promoting success at the individual and group level (Danaher, et al., 2006).

Developing thinking

The quantity and availability of information is growing exponentially, the mass media (TV, radio, movies, internet and print of all kinds) and the ease of travel creates an information environment. This according to Gilman (1997) shifts educational goals away from "amassing knowledge and toward building the general skills required to be a creative participant in a rapidly changing world" (p. 22). The ability to critically think and assess information and other more generic skills are essential for life-long learning.

Prior knowledge is known to influence learning and is "the major determinant of capability, capacity, disposition and facility" in the classroom (Yates & Chandler, 1996, p. 14). The balance of automatic and controlled mental processing skills determines the way students act and respond in new situations. Educators are able to help students identify, focus on and examine underlying assumptions (Freire, 1972; Mezirow, 1991). Engagement with students in and out of the classroom enables ongoing dialogue which causes deeper and reflective learning to occur (Mezirow, 1996b). Educator accessibility and asking questions are critical to learning (Anderson et al., 2004). New tasks and information requires considerable effort and attention, but with (considerable) practice, new knowledge and skills can become internalised and automated.

Harcourt (2006) believes the lack of inherent knowledge of basic concepts makes it difficult for students to connect new ideas and gain understandings of the subject as a whole. Meaning is made when understanding occurs. Schemas need to be acquired and developed, which can be built by analogies and metaphors relating the unknown to the known (Yates & Chandler, 1996). New schemas can be learned by students generalising the explanation of a single example if they can apply their knowledge (Parrish & Hiatt, 1989). It is essential to contextualise subject matter so students understand its relevance (Harcourt, 2006). Cross (1998) asserts that learning communities are more effective in enhancing the development of new schemas than lectures and textbooks as they offer more links and a larger picture beyond the individual's perspective.

Study Skills

A fundamental principle of bridging education is that the learning process addresses individual learning needs. A range of skills are needed for success in tertiary study and employment including practical skills (such as planning and study goals) and affective skills (such as motivation and self-regulation). Teaching academic skills within structured learning experiences enables a range of skills to develop (Silburn, 2005).

Du Bois and Staley (1997) assert that study skills and strategies for learning are not often explicitly taught in undergraduate programmes. They indicate a range of literature showing many students have 'poor' or inefficient methods or strategies for studying, including ineffective strategies to: adequately process information from expository texts; adapt to poor instructional conditions; to effectively take notes; learn procedural knowledge. They also report that students 'lack' learning goals, beliefs and attitudes that lead to the adoption of effective learning strategies; adequate knowledge about time management strategies; and volitional strategies to sustain academic motivation and learning. They assert that these are all skills necessary for the learning demands placed on students in both academic settings and employment. Bedford (2006) believes that the ability to access a range of learning skills is associated with retention, completion and progression when learnt in the early stages of a tertiary programme.

Bennett, Dunne and Carre (1999) organise the core learning skills into four main groups: management of self, management of others, management of task and management of information (see Table 3.1). These skills can be learned through subjects and disciplines in several different ways.

Table 3.1: A framework for the development of generic skills

MANAGEMENT OF SELF	MANAGEMENT OF INFORMATION
• manage time effectively • set of objectives, priorities and standards • take responsibility for own learning • listen actively and with purpose • use a range of academic skills (analysis, synthesis, argument etc) • develop and adapt learning strategies • show intellectual flexibility • use learning in new / different situations • plan/work towards long-term aims and goals • purposefully reflect on own learning • clarify with criticism constructively • cope with stress	• use appropriate sources of information (library, retrieval, systems, people etc) • use appropriate technology including IT • use appropriate media • handle large amounts of information/data effectively • use appropriate language and form in a range of activities • interpret a variety of information forms • present information/ideas competently (orally, in written form, visually) • respond to different purposes/contexts/audiences • use information critically • use information in innovative and creative ways
MANAGEMENT OF OTHERS	MANAGEMENT OF TASK
• carry out agreed tasks • respect the views and values of others • work productively in a cooperative context • adapt to the needs of the group • defend/justify views or actions • take initiative and lead others • delegate and stand back • negotiate • offer constructive criticism • take the role of chairperson • learn in a collaborative context • assist/support others in learning	• identify key features • conceptualise issues • set and maintain priorities • identify strategic options • plan/implement a course of action • organise sub-tasks • use and develop appropriate strategies • assess outcomes

(Source: Bennett, Dunne & Carre, 1999, p. 78).

The range of skills each programme determines important (part of the graduate profile) can vary significantly. Education needs to equip individuals for multiple career lives, where creativity, adaptability and effective inter- and intra- personal skills are established (Bedford, 2006; Bennett, Dunne, & Carre, 1999). The skills learned in a bridging programme need to be generic and widely applicable.

Bridging programmes appear to use the range of skill development methods, which can be identified by broad structural factors into three main categories. "These are embedded or integrated development, parallel or stand alone development – often called bolt-on courses, and work placements or work based projects" (Drummond, Nixon & Wiltshier, 1997, as cited in Bennett et al., 1999, p. 79). The demystification of learning processes is an essential part of skill development regardless of the form it takes.

Hoffman (2004) believes that integrated study skills programmes are a successful pedagogical model and method for bridging education as they are more effective in assisting students with creating opportunities for fundamental changes in attitudes and study habits. It is the integration of study skills within a context rather purely focusing on techniques and strategies that improves their effectiveness, as application of study skills in a range of learning situations occurs more frequently if strategies are integrated (Chalmers & Fuller, 1996; Hoffman, 2004). When study skills are integrated early in a student's bridging programme, they are more effectively equipped with new efficient learning patterns, gaining the ability to reflect and amend or adapt their strategies as needed (Hoffman, 2004).

Parallel or stand alone study skills programmes are more effective if they are proactive in their approach rather than reactive (Arendale, n.d.). While use of parallel or stand alone study skills programmes are beneficial, low usage rates occur due to factors such as student's perceived lack of time, feelings of being overwhelmed by competing academic demands, insecurity and family obligations (Mabbett et al., 2005; Schmidt et al., 2005). Most often, non-traditional students experience these factors and so are more vulnerable and marginalised, making the uptake of parallel or stand alone study skills programmes unlikely (Schmidt et al., 2005).

The variety of learning and teaching strategies employed in the classroom should be related to the student's experiences and be relevant to their ongoing learning. How these strategies and tertiary learning skills influence learning at higher levels of study is not clear. While a range of transferred skills is desirable, the literature suggests their transferability is merely an assumption. Bennett, Dunne and Carre (1999) point to a

considerable range of literature showing that transferable skills learnt in one area are not necessarily transferred into relevant contexts by students. Burwood (1999) suggests that skills learnt in higher educational settings are both general and idiosyncratic and the relationship is complex but that they are not always of universal value:

> The claim that such skills have general utility has to be made tentatively. Despite pressure to justify teaching in terms of the acquisition of transferable skills, it may well be the case that skills learnt in educational contexts (or any context at all) are largely peculiar to those contexts. (Burwood, 1999, p. 457)

While the skills learnt in bridging programmes may be useful academically, the ability of students to transfer these skills to other or different tasks, both academic and social is not guaranteed. The range of self-regulatory and metacognitive factors engaged in the learning to learn process may be influential. Bedford (2006) outlines a clear conceptualisation of generic study skills located in the model of self-regulated learning, in a formal tertiary educational context that provides a focus for programme and curriculum design and implementation for under-prepared or novice students. Through making explicit the self-regulatory processes of learning, linking underlying psychological constructs and transferrable skills, students are more able to transfer the skills into other contexts. Research would suggest that bridging programmes are effective in addressing a range of skills deficits and enable students to enter undergraduate study equipped and prepared (Cantwell, 2004; Parrish & Hiatt, 1989). Although the research does not make apparent the methods used.

Technology

Improved computer and technology literacy is a desired outcome of bridging programmes (Anderson, 2007; Huston, Shovein, Damazo, & Fox, 2001). Technology can offer students an extension to the traditional face-to-face classroom environment and be an added dimension to learning, expanding the classroom environment (Kennington, 2006). On-line learning is effective for students who are challenged to attend class and meet with other students after class. It can be used to: support student learning, reinforced topic/issue, provide information and is accessible to all students enrolled, assuming they have computer an internet access. Anderson (2007) suggests that the technological future is uncertain, but that literacy's around technology, while unpredictable need to be a part of bridging programmes, as well as ethics, politics, sociology and the traditional skills of reading, writing, arithmetic and so on. The technology driven change of the present and future is a part of everyday life and so, bridging students must be enabled (where appropriate) to fully participate.

Learning and culture

Cross cultural application of student approaches to learning is disputed. As previously stated, educators must be aware of the different influences an individual's culture brings to the learning environment (Anae, et al., 2002; Cowley, et al., 2001; Dirks et al., 2006). Empathy and awareness of the students needs is required to engage them in meaningful learning experiences. Learning environments that are supportive, challenging and show shared understandings of knowledge and practices, centred on the students cultural identity, is critical, particularly for Māori, Pasifika and other non-western students.

Gordon, Cantwell and Moore (1998) note research suggesting that the way learning and understanding occurs for non-western students is very different than that of western students and cannot be identified by the deep/surface distinction but rather is linked to the complex role of repetition and rote learning. Conceptions of learning discussed by Gordon et al., (1998) include: a quantitative increase in knowledge; memorising; the acquisition of facts, methods and so forth, which can be retained and used when necessary; the abstraction of meaning, and an interpretative process aimed at understanding reality. They suggest that further cultural conceptions of learning included Japanese students who saw learning as: a 'duty'; 'a process not bound by time or context'; and 'developing social competence'; and Chinese students who believe that 'learning could change the person'. To understand and explain learning from the perspective of the student, it is necessary to try and see this from the students point of view through their cultural constructs. There are no universals, rather, concepts are culture specific (Gordon et al., 1998). The socially mediated process of learning may be inextricable from the student's lives.

Psychological Factors

Human behaviour has been explained as the function of personal factors and the characteristics of their environment (Tishler, 1996). A range of theories focus on different aspects, as the interrelationships are imprecise but there is a close link between the social orientation, emotional predisposition and cognition of bridging students (Cantwell & Mulhearn, 1997; Illeris, 2002; Morgan, 2004). It is recognised that students who are successful in their studies have similar attributes (Harford, 2002; Oesterreich, 2000; Watson, Johnson, & Austin, 2004). These include factors such as: gender, age, marital status, children in the home, disability, awareness of topic, attitudes toward topic, career alignment of their study, use of coping strategies. It also includes classroom teachers characteristics, students perceptions of their teachers, use of students

ideas, collaboration, classroom factors, students perceptions on the roles of and value of the text, parents, home life and community involvement. The variety of factors, personal, social and societal, show the importance of students understanding the social norms, values and expected behaviours necessary for university (Cantwell, 2004; Cantwell & Scevak, 2004; Harford, 2002). These need to be deconstructed and demystified for the diverse group of bridging students.

The environment (both the task and the conditions surrounding the task) exerts considerable influence on performance (Cantwell et al., 2001; Cantwell et al., 1997). Thoughts, emotions and behaviours are understood most clearly within particular learning situations and can vary significantly between activities, subjects and classrooms. Studies in Australia have found that bridging students have high needs for acceptance, self worth and belonging, and that the development of interaction and organisational skills precedes the development of conceptual understandings (Danaher et al., 2006). This would appear to indicate that the development of social skills and social integration (through effective learning communities) is essential and is required to ensure academic understanding and growth.

Harcourt (2006) believes that the student dynamic changes constantly and the ability to engage and motivate students is a skill that needs to be continually developed. Both the delivery of educational content and external factors such as life experience have a dramatic effect on how students relate to each other, to the educator and to the teaching environment (Harcourt, 2006). Educators need to constantly reflect on the success with which they are engaging the students and address gaps in their knowledge. Coaching, mentoring and nurturing of students are important aspects of the educator/student relationship (Harford et al., 2003). Students feel at ease in a learner-centered environment, enabling them to bring pre-existing knowledge to the class (Harcourt, 2006). Students establish positive networks when their existing knowledge and experience is valued in the classroom, enabling them to discuss issues related to their learning.

Psychological growth

Psychological growth is a significantly reported outcome of bridging programmes, including increased self-esteem, although few studies identify gender, ethnicity or other variables. Morgan (2004) notes that both men and women involved in bridging programmes gain and experience a greater understanding of self. Bailey (2002) completed a study on participants from the 'Education Bridging for Women'

programme at what is now AUT University. She found that while the programme was successful in helping the women move into further education and employment, it was the personal growth and change in self concept that was the most meaningful, although there were "important differences in outcomes between different groups of women" (Bailey, 2002, p. 89). Bailey noted that women over thirty years, without disability and immigrants were more likely to pursue full time further study, as were women of Pasifika background, and those who were unmarried and had no or more than one children. She believes that it is the complexity of women's lives and their 'life-loads' (the balance of a range of roles including parenting, paid and voluntary work, running a home) with study, that has a significant and diverse impact on women.

It is believed that there is a connection between an individual's coping strategies and their appraisal of situations (Alexander & Onwuegbuzie, 2007). University students face many and varied sources of academic stress and their self regulatory process are important in mitigating them. Affleck and Tennen (1996, as cited in Alexander & Onwuegbuzie, 2007) found that during stressful situations, hope was a significant factor in appraisal of a situation and suggested that positive appraisals of adversity may be uniquely shaped by hope. Hope is "the perceived capability to derive pathways to desired goals and motivate oneself via agency thinking to use those pathways" (Snyder, 2002, p. 249). Levels of hope correlate with assessment results, levels of anxiety, while maladaptive studying and examination-taking coping strategies has also been associated with academic procrastination as it relates to the fear of failure (Alexander & Onwuegbuzie, 2007).

Self-regulation/attitudinal aspects

Bridging programmes designed to prepare students for tertiary study should facilitate the development of self-regulation in the learning processes, as it has been positively associated with progress in tertiary education (Bedford, 2006; Du Bois & Staley, 1997; Zimmerman, 1998). The most effective students self-regulate throughout life. Academic "self-regulation can be defined as self-generated thoughts, feelings and actions for attaining academic goals" (Zimmerman, 1998, p. 73). Schunk (1990) explained that "self-regulated learning occurs when students activate and sustain cognitions and behaviours systematically orientated towards attainment of learning goals" (p. 71). Self-regulation of learning is an important aspect enabling students to update knowledge and skills in the rapidly changing knowledge economy (Du Bois & Staley, 1997; Zimmerman, 1998). Student's awareness of themselves as learners, the strategies they

select to complete their work and their approach to learning is markedly different between mature and younger students (Cantwell, Archer, & Bourke, 2001). Gaining self-management skills, such as time management, goal setting and evaluation promotes success. Effective students acquire and use their knowledge about the process of learning, which allows them to organise, plan and monitor their own learning.

Self-regulation is a multidimensional range of context-specific processes that are selectively used to succeed in learning (Zimmerman, 1998). When viewed within a framework of social cognitive learning theory, self-regulation is comprised of three sub-processes: self-observation, self-judgement and self-reaction (Bandura, 1986, 1993; Schunk, 1990). Zimmerman (1997) and Schunk (1998) both imply self-regulated learners are goal-directed learners, whose thoughts, feelings and actions are aligned to achieve or attain the academic goal. Du Bois and Staley (1990) identify four general psychological dimensions of self-regulated learners: motivational, metacognitive, volitional (supporting and managing processes) and cognitive (the production of knowledge).

Knowledge of self-regulatory strategies is not enough as students also need to know how, when and where these strategies should be used. This is known as conditional knowledge about self-regulation (Cantwell & Moore, 1996). Curriculum design and implementation of bridging programmes should be informed by understanding and modelling of self-regulated learning (Bedford, 2006). The design and implementation of curricula which includes facilitation of student self-regulation in the early stages of tertiary study is empowering for students (Du Bois & Staley, 1997), particularly those who enter bridging education. Bedford (2001, as cited in Bedford, 2006) asserts linking self-regulation to the four generic management processes (planning, organising, leading and controlling) can be used to provide a model for curriculum implementation for underprepared and bridging students. This is founded on a belief that if students personalise knowledge of self-regulated learning, they are able to integrate a range of skills to be more effective. Integration occurs as students gain awareness of their current levels of attitudes, beliefs and strategies, and contrast it with more effective practices learnt in theory and engaged in guided practice (Du Bois & Staley, 1997).

Consistent long term application of a range of skills and knowledge is linked to the students knowledge of the strategy application and effectiveness (Pressley, Borkowski & O'Sullivan, 1984, as cited in Du Bois & Staley, 1997). Change in the beliefs about learning and repeated opportunities to practice a repertoire of skills and strategies takes

time and effort at bridging level and beyond. Archer et al., (1999) noted that former bridging students in undergraduate study had greater confidence in problem solving, planning, self appraisal and improved motivation. Former bridging students in degree study also reported stronger mastery goals, lower alienation goals and greater confidence in decision-making and self-appraisals; however, this was attributed to the late acquisition of these attributes (Cantwell et al., 1997; Cantwell et al., 2001).

Cantwell and Moore (1996) point to differences among students in their conditional knowledge of self-regulatory strategies. They found a distinction between adaptive and maladaptive beliefs about the nature of and need for executive control practices. This also affected the use of self-regulation related to both the knowledge and adjustment required to meet the demands of particular tasks. Students with an adaptive approach to executive control had consistently positive outcomes, irrespective of the subject domain. They were able to be flexible in planning, in accomplishing different tasks and in monitoring their thinking about the tasks. Students with maladaptive practices had an awareness of cognitive failure and the need to implement repair strategies, yet were more inflexible in their approach, refusing or unable to adjust their methods of study to suit particular tasks. Students may be confused and uncertain about why and how to adjust their strategies to suit different tasks. Cantwell and Moore (1996) note that structural support within a programme where study skills and tactics are habitually used may assist students with maladaptive strategies to reach a level of competence. However, "the need to accommodate more generative and constructive learning strategies may well go beyond the metacognitive limits of these students" (Cantwell & Moore, 1996, p. 515).

Self-regulation and International students

Prior knowledge, linguistic skills and individual characteristics of students are significant factors when considering a diverse learning cohort. A three year longitudinal study of international students studying at an Australian university sought to compare student conceptions of the learning process from a university preparatory (bridging) programme to university undergraduate study almost three years later (Gordon et al., 1998). While the international students were aware of changed situational factors in the learning environment, this did not necessarily correspond with an adjustment in the approach to learning. This supports the Vygotskian assumption that learning is socially mediated (Gordon, et al., 1998; Vygotsky, 1978). Gordon, et al., notes:

Students will adjust their learning and their search for understanding within the parameters they see as constraints within which they must operate. For international students these constraints could be language, perceived intellectual capacity, fear of failure or perceived situational constraints in the lack of time to undertake a task to achieve all desired learning outcomes. (Gordon, et al., 1998, p. 12)

The capacity to generate and use a range of relationships between task demands and metacognitive demands while planning and engaging in a task is important for students ongoing success and engagement. Assisting students to recognise and overcome barriers is a vital part of bridging education, as success impacts on confidence and motivation.

Motivation, self confidence and self-efficacy

The term motivation describes what energises and directs a person's activity (Tishler, 1996). The energy and direction of learning-teaching situations can vary markedly. Motivation is a significant factor that facilitates learning in that it enhances effort, attention and readiness for learning (Tishler, 1996). Tishler outlines a range of factors which influence motivation, including the following. Behaviouristic theories (for example, Skinner) assume that behaviour is a response initiated by an internal or external stimulus, which if reinforced is likely to be repeated. Responses include: praise, written comments, grades and modelling. Responses to objects and events are also influenced by individuals thinking and analysis of their experience which relates to cognitive theories (for example, Piaget). Curiosity, arousal, interest, striving for competence and a sense of success all relate to the cognitive aspects of motivation. Environmental variables such as the social ethos, organisational and management factors, the physical design and layout of the classroom can also influence motivation.

Mature students entering university bridging programmes traditionally have deeper learning intentions than younger students (Archer et al., 1999; Richardson, 1994). They are "motivated by a desire for personal fulfilment, and tend to adopt learning strategies consistent with the desire to construct personally meaningful representations of the knowledge to be learned" (Cantwell & Scevak, 2004, p. 134). Younger students are often initially 'other driven' (Piercy, 2001). The pressure from parents to gain a degree and the desire or pressure to remain with school peers entering tertiary study is an extrinsic motivation. This is very different from deeper goal orientated motivations.

Mature students are more willing to adapt to the learning demands and actively engage in learning than younger students (Collinson & Drayton, 2002), however, bridging students who have had a year to learn in the university environment appear to adapt and

engage as well as mature students in their undergraduate study (Huston et al., 2001; Walters & Foreman, 2005). Former bridging students in undergraduate study were found to have higher mastery goals and lower academic alienation than other undergraduate students, causing increased motivation (Archer et al., 1999). The confidence and motivation with which they enter further study appears to be invaluable.

Cantwell et al., (1997) suggest there are three recognised types of achievement goals. First, a performance (or ego) goal in which students are primarily concerned with demonstrating their ability to others (or concealing a lack of ability from others). Secondly, a mastery (task or learning) goal in which students want to develop understanding or competence in a task. Finally, academic alienation (or work avoidance) in which students aim to complete work with the minimum of effort and they are not concerned with how their peers perceive them. As motivational goals are relatively enduring traits, environmental factors (such as engagement, anxiety and the classroom environment) can affect learning, motivation and self-regulation practices.

Improved motivation is seen in bridging students who are a cohesive part of a positive and supportive learning environment (Ramsay, 2004). Intensive support and coaching, ensuring the course content is meaningful to students, along with appropriate and meaningful assessments is found to effectively shift the motivations of younger students (Piercy, 2001). Bandura (1993) argues that thought and action is guided by a belief in one's competence. A student's perceived self-efficacy contributes to cognitive development and functioning, specifically cognitive, motivational, affective and selection processes. Levels of self-efficacy correlate with persistence, when difficulties and challenging tasks arise, without confidence a student may retreat from the task, experience anxiety and self doubt and procrastinate. Self efficacy is influenced by prior experiences, ability, attitudes towards learning, instruction and the social context (Bandura, 1986; Schunk, 1990). As students work towards goals they assess their progress and adjust their behaviours (self-regulation), positive progress enhances efficacy, leading students to set new challenges (Schunk, 1990). Improved learner self confidence has been associated with bridging students having gained familiarity with university surroundings, procedures, staff and other students (Murphy et al., 1992).

Social Factors

Many variables can affect the academic success of bridging students: age; gender; occupational history; family circumstances; ability; self-confidence; achievement goals; and approaches to self-regulation of academic behaviour (Cantwell et al., 1997). The

influence of families, the community and educators are unequivocally the main influences on students (Ministry of Education, 2005). Physical and psychological demands are also significant influences on students decisions to continue with study. Learning includes social and cultural aspects as well as cognitive and affective aspects. Vygotsky (1978) believed learning was socially mediated and an individual's learning could not be separated from the environment in which it occurs. The internalised social and cultural background of the individual mediates change and transformation in later development. An individual's approach to learning and understanding are constructed through cultural filters. Meta-cognition is fundamentally mediated by social and cultural factors (Gordon et al., 1998).

The student's degree of connectedness to both themselves, their belief and ability to succeed and their support networks are factors in academic success (Harford et al., 2003; Harford, 2002). The socialisation of students to the university campus and their student role occurs during a bridging programme (Huston et al., 2001). Harford (2002) asserts that support networks with peers and educators, developed in classrooms which are student centred and content focused are most beneficial. Opportunities actively engage in learning activities with others are a significant aspect of collaborative learning/learning communities. A range of social support from individuals and groups enables them to experience the challenges, conflicts and stresses associated with change while also preparing them for further undergraduate study.

Support

There are several types of support which influences students, including institutions, educators, peers, family and friends. Support at an institutional level is important (Anderson, 2003; Dewart, 2003; Harford et al., 2003; Zepke & Leach, 2006, 2007). Clarity about course selection, requirements, criteria and expectations is required before commencement of the programme along with a clear orientation to the 'system' and physical environment. Educators and other staff in the tertiary environment can provide students with content, academic and affective support to promote development (Dewart, 2003; Giles, 2004; Harford, 2002; McClenney & Greene, 2005; Oesterreich, 2000). These include such things as: courses focusing on study skills; support networks; study groups and tutoring; test preparation; learning communities; high expectations and a programme that focuses on learning and achieving in a supportive, understanding and encouraging environment. Clear articulation of expectations and workload requirements and support with academic problems (such as problems with staff, other students and

timetables) are essential. Individual differences, along with factors such as cultural background and institutional support help to shape the qualitative differences observed in student outcomes (Gordon et al., 1998).

Peers can play a significant role in support and accountability (Harford, 2002; McClenney & Greene, 2005). Established peer connections can provide means for follow-up, learning support and motivation, as well as some fun. Anderson et al., (2004) notes academic and social engagement are inextricable. Study groups, either student initiated or educator facilitated, occur in formal and informal ways and their make-up is often serendipitous (Anderson et al., 2004). Programmes where students study and complete common learning experiences together over time, are effective in breaking the isolation that can occur in tertiary study (Maher, 2004). Defined membership over time, common goals, structured meetings and synergistic learning relationships that are developed and shared by members are the four characteristics of a cohort (Maher, 2004). Working closely with peers in a cohort facilitates individual and group experiences, builds a family like environment and can improve the retention and completion of students (Maher, 2004; McClenney & Greene, 2005).

The level of support from relatives, family and friends can promote of hinder a student's progress (Danaher et al., 2006). As well as the many personal and family issues and problems that may arise (such as childcare, health, employment, housing, transport and peer pressure), social support from family, friends and peers has a significant buffering effect on the challenges tertiary and bridging education brings (Dewart, 2003; Harford et al., 2003; Harford, 2002; Zepke & Leach, 2007). Difficulties are often mediated when others who care are able to assist. The ancient African proverb '[i]t takes a village to raise a child' indicates a truth that individuals are interrelated.

Bridging students need to include the people significant in their life and journey (Danaher et al., 2006; Harford, 2002). Family can feel threatened by the social and domestic changes associated with study. Using the skills gained, such as time management, can ensure quality time is spent with family to mitigate relational difficulties. Positive change and development in the student can influence family and friends. The witnessed transformation of values and attitudes of the bridging student has also encouraged others to pursue education (Danaher et al., 2006).

Broader vision

The idea of the inter-connections and influence of the developing student on their social networks and broader community can be considered using Bronfenbrenner's bioecological model. It shows the developmental links between the individual, the people and social structures around them. Many bridging students have "high aspirations, which are linked to serving the community. They see their potential as a way to 'give back' to society or contribute in such a way that improves the welfare and interests of other members of the community" (Silburn, 2005, p. 106). An individual's image of the future actively promotes cognition and choice, and in effect becomes self-fulfilling because it is self-propelling (Cooperrider & Srivastva, 1987; Cooperrider & Whitney, 2000). Human beings have the ability to create their own realities, in the present and in the future (this is also supported by neuro-linguistic programming). Students who can clearly perceive a future are more able to attain it.

Financial Factors

The financial implications of tertiary education when starting at bridging level is another significant aspect to consider. The financial cost of study is a consideration for many non-traditional students who are often from low socioeconomic backgrounds. The added cost of bridging education may act as a barrier to participation or increase the indebtedness of groups already associated with high levels of debt (Anderson, 2001). Failure and non completion of study is high for non-traditional students (Education Counts, n.d.) and the debt incurred may take years to pay off if the individual engages in unskilled or low paying employment. Tertiary education is a sound financial investment for those in early adulthood, however, the recovery of enrollment fees and loss of earnings is uncertain for those over 40 years (OECD, 1996 as cited in Benseman, 2002).

Mature students, many of whom come from low socio-economic backgrounds may have to leave fulltime employment to pursue study disadvantaging them further (Anderson, 2001; Cantwell et al., 2001). Mature aged former bridging students were more likely to be part-time degree students as many contended with major family responsibilities (Cantwell et al., 2001), this adds to the risk of non completion. Many bridging students face a complex set of financial challenges which can be overwhelming (Silburn, 2005). Increasing fees, student loans, family and social demands can place added, often long term, financial burdens and stress on students and their families. Stress is one factor that can influence health, retention and completion.

A Holistic Influence

Learning is a holistic growth process, where the student moves along a transformative trajectory towards a more fully realised completeness or wholeness using a myriad of resources (both intrinsic and extrinsic) (Hamil, 2002). Learning occurs within a complex framework of cultural, social, institutional and psychological variables that interact in often unpredictable ways. Dahlgren and Whitehead (2007) identified the main influences or determinants of health as illustrated by a series of layers (Figure 3.1). The age, sex and genetic make-up of individuals is fixed however, the other variables, including education, can influence health. Each layer impacts on the other layers, which can have beneficial or adverse effects on an individual's health. Bridging education has the potential to influence living conditions, financial resources, strengthen social support, increase knowledge which may inform lifestyle choices and attitudes. Learning must be encouraged in both formal and non formal settings (Boshier, 2002).
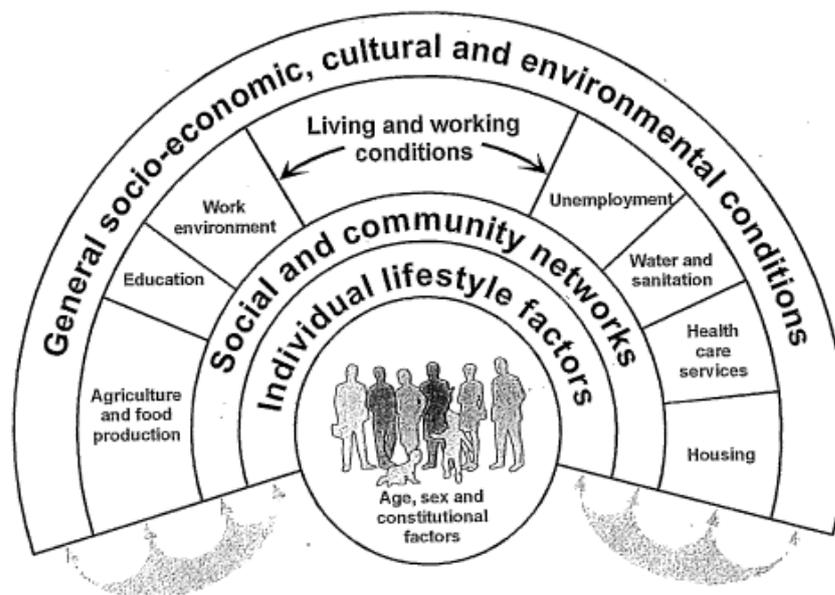
Figure 3.1: The determinants of health

(Source: Dahlgren & Whitehead, 2007, p. 11).

Education aimed at developing great human beings, who are valuable contributors to society is perhaps more important than developing academic competence and achievement (Korthagen, 2004). Personal, social and economic wellbeing are facilitated by growth in 'human capital', the individual's knowledge, skills, competencies and attributes (Stroombergen, Rose, & Nana, 2002). Human capital can be enhanced by the quantity and quality of education. Like throwing a stone in a pond causes ripples, as change occurs within one area of an individuals life, I believe there are corresponding changes in other areas of life, physically, mentally and socially.

Contextualising the Current Study

I believe this research project to be justified based on the range of research and literature presented. Aotearoa New Zealand has a range of tertiary education providers offering a wide range of academic and professional courses. These include eight universities, twenty two Polytechnics, numerous Private Training Establishments, Adult Continuing Education providers and three Wānanga that offer general undergraduate and graduate degrees, diplomas and certificates in a range of subjects. Increased participation rates in tertiary education have resulted in an increased diversity of students including many non-traditional students.

Not all students applying for tertiary study at degree level are accepted for many reasons. These include secondary school students who failed to meet the academic requirements for university entrance to undergraduate study, students who left school before completing secondary schooling, those who are over 18 years and wish to return to formal tertiary learning and international students who fail to meet entry requirements (such as IELTS).

Universities, polytechnics and TEI's offer a range of bridging courses, the programmes vary in focus, length, intensity and many are specifically designed to prepare students for further study within the institution. Bridging programmes have some clear advantages for students who do not meet the entry requirements. They offer a second chance to prepare, opportunities to study on-campus with others, access to resources and student services. Many programmes offer small classes and are specifically designed to develop skills and knowledge that aim to ensure success at undergraduate level. Many also qualify for student loans. Successful completion of the programme can result in eligibility for undergraduate programmes.

AUT University offers a range of pre-degree certificates and diplomas in: Health; Sport and Recreation; Sciences; Art and Design; Communications; Computing and Mathematical Sciences; Hospitality and Tourism; Social Sciences; Te Ara Poutama (Māori Development); Engineering; Languages; and Education. Each offers pathways to undergraduate programmes for successful students. The health based 'Foundation Studies' programme offers two certificates to assist students bridging to undergraduate degree programmes in the Faculty of Health and Environmental Sciences.

The relatively open entrance to universities in Aotearoa New Zealand for adults (over 20 years) has some negative impacts on students ill-prepared for learning in a university environment. In many countries, including England and Australia, concerns have been

raised about adult students entering university through recognition of prior learning (Cantwell & Scevak, 2004). The unique demands of university learning are qualitatively different to knowledge associated with other settings, particularly "the level and abstraction of the knowledge to be acquired and understood" (Cantwell & Scevak, 2004, p. 132). Students entering university have repeatedly been shown to be successful following bridging programmes (Archer et al., 1999; Cantwell et al., 2001; Cantwell & Grayson, 2002; Harford, 2002; Richardson, 1994). Because bridging programmes usually orientate the student to university study (both culturally and epistemologically) they enter subsequent undergraduate study well prepared and often perform well. Research does not show that the skills and knowledge learnt in bridging programmes are transferrable to other areas of life apart from academia. Research into bridging education in New Zealand is limited and there is no published information on the long term effect or influence of New Zealand bridging programmes currently available.

Prior research has shown there are many factors influencing students including; personal and family characteristics, efficacy, motivation, prior academic achievement, the academic setting (Lang, 2001; Prussia & Weis, 2003; Thompson & Thornton, 2002). Kerka's (1995) 'Adult Persistence in Learning Model' combines "personal issues (values, goals, interpersonal competence, mastery of life transitions), academic issues (ability, learning style, study skills), and social/environmental issues (environmental compatibility), based on the assumption that adult participation is a complicated response to a series of issues" (p. 3). This model and other studies focus on the students participation and persistence in study, but how these factors are influenced by the completion of papers in bridging programmes is unclear in the literature. It is not clear how bridging programmes influence students.

The identification of the factors in the bridging programme that influence students continuing in study at a higher level will provide data on the effects of bridging education and may add to the current literature on the topic of retention. This may enable clear strategies to be formulated and implemented by bridging educators to further assist in the ongoing retention, completion and progression of bridging students. The identification of these factors and subsequent strategies has wider application to other programmes within AUT university, and possibly the wider learning community. This study will therefore add to the New Zealand literature on bridging education and bring new insight into the influence of a bridging programme on some of the students who are completing undergraduate study.

Concluding Comments

The influences on bridging students come from a diverse range of sources as Bronfenbrenner's bioecological theory illustrates. Understanding the reciprocal nature of the influences can provide keys to the underlying processes of academic achievement and ongoing development that occur. Institutions, educators and students converge in bridging education. The interplay of diverse backgrounds, cultural, social and political factors makes every individual's experience unique.

Institutions have a significant impact on the policies, procedures and resources that studetns interact with in explicit and implicit ways. Programmes vary significantly in design and implementation but have the general aim of equipping students with the required skills for success in tertiary education. Responsible bridging pedagogy seeks to create a match between the educator's perspective, the social, economic and cultural context of the classroom, the process of teaching and the pedagogical decisions made. Many bridging educators balance a complex awareness of their role in enhancing the interests of all groups, while attempting to remove institutional, coercive and ideological barriers. They challenge and assist students to find new ways of learning and acting in the world through a variety of strategies, skills and content knowledge.

Bridging students come to tertiary education with diverse backgrounds, life and educational experiences. Effective academic and intellectual functioning requires much more than simply understanding the factual and conditional knowledge for a given task. Self-regulation, motivational, self-efficacy, other affective factors and social aspects contribute and influence cognitive functioning. Engagement in the learning context and support at all levels is necessary to ensure ongoing success. The demands of family and society are significant factors affecting students.

The context of the current study was discussed in light of the literature showing the relevance of bridging education and the need to gain greater understandings of its holistic influence. In examining a unique context, this research hopes new information on the influence of bridging education may be discovered and understood more clearly.

The qualitative research design discussed in the next chapter enabled rich data of individuals lived experience to be gathered so as to ascertain the influence of a bridging programme.

Chapter 4: Methodology

"If we knew what it was we were doing, it would not be called research, would it?" Albert Einstein (source unknown). There are many paths that lead onwards in the journey. To be true to oneself and the task, paths and opportunities must be disregarded or circumvented. There are times when there is light and the journey is clear and the path level, but oft I am found in the darkness and uncertainty of the unknown. Others have passed this way before and leave markers to those willing to seek and follow. Tis the wisdom and experience of others (thank-you), and a willingness to follow (and risk) that causes me to forge on in the journey. (Research journal entry, 28 March, 2006)

Overview

Research seeks to gain a greater understanding of the phenomenon under investigation. The purpose of the research should determine the choice methods (Bogdan & Biklen, 2006; Mutch, 2005). Former student's anecdotes and the literature led me to the question, *how does bridging education influence students?* The goal of this research was to identify and explore the influence of a specific bridging programme from the perspective of students who had completed papers in a bridging programme and gone on to further undergraduate study in health majors at a university. Casual conversations with former bridging students indicated the bridging programme influenced their ongoing academic studies and some noted a broader influence. This chapter discusses and explains the underlying assumptions and theoretical basis from which decisions and practices within this research emerge. It outlined the process of the research and the underlying methodological framework and methods utilised in this study. The context of the study is discussed and an overview of the bridging programme in which the research occurs is described. Furthermore, it identified the processes used in the gathering and analysis of data and finally discussed the relevant ethical considerations to this study.

Theoretical Basis

While I am theoretically eclectic, this research is founded on a belief that further understandings can be gained from the perspectives of participants which indicates an epistemological grounding of constructionism (Crotty, 1998). There are many ways to interpret experiences and reality, but a constructionist stance holds that "truth, or meaning, comes into existence in and out of our engagement with the realities in our world" (Crotty, 1998, p. 8). Meanings are constructed as people engage consciously with objects and the world they are interpreting, and people can create different meanings from the same phenomenon. Constructionism suggests that the conventional meanings of an object or topic can be re-examined and fresh data from a new and

specific context can provide new understandings, it is an invitation to re-interpretation (Cresswell, 2008; Crotty, 1998).

From a constructionist viewpoint, objectivity and subjectivity are held together indissolubly, they are always united (Crotty, 1998). The 'subject' is held and focused on, while the curiosity of the observer makes meaning based on the social world in which they live. The culture within which individuals are embedded and inhabit determines the social meanings and character of their understandings. All people see through a cultural lens, people "inherit a system of significant symbols" (Crotty, 1998, p. 54) which are bestowed upon them by the culture(s) in which they live. People interact with objects in socially constructed ways, however, as people make sense of the world they interpret and reinterpret social realities. Culture shapes the ways people see and feel things. Constructionism fosters critical thought as it seeks to reinterpret familiar, inherited and prevailing understandings. It enables the hegemonic meanings and interests of cultural inheritance to be revisited and reinterpreted. Furthermore, Crotty argues "When we describe something, we are, in the normal course of events, reporting how something is seen and reacted to, and thereby meaningfully constructed, within a given community or set of communities" (1998, p. 64). There is never one explanation or interpretation that fits all people. This research is approached from a constructionist stance, in a spirit of openness to finding potentially new and richer meanings of the influence of a bridging programme on students in further study.

I do not hold to the assumption that the world can be described and explained by the use of rational methods as a single system, this would be problematic and is rejected from a constructionist viewpoint (Thomas & Glenny, 2004). The idea of creating order and unity on the chaotic and fragile character of the social world of human affairs is tenuous. While it is possible to quantify and measure, learning and education is primarily a way of interacting with the world (Cohen, Manion & Morrison, 2007; Crotty, 1998). When considering an educational context, the inter-connectedness of the various factors must be considered and taken into account. Therefore, when considering a paradigm to base this research on, the interpretive paradigm which rather than quantifying experience and reducing it to statistics (the 'positivist' paradigm) allows the voices of people to be heard and "attempts to get back to 'the things themselves'" (Grant & Giddings, 2002, p. 16). Interpretivism attempts to understand and explain human and social reality as an integrated whole (Crotty, 1998; Mutch, 2005). The ability of the researcher to identify, understand and see through the cultural lenses

inherent in society is critical to the success of the research and the reinterpretation of the issue (Cresswell, 2008; Crotty, 1998; Neuman, 2003). The interpretive theoretical perspective focuses on gaining understandings of what it is to be a human and the meanings that individuals place on events in their lives and best fits this research.

As an educator within the context under investigation, my subjectivity (as a researcher using an interpretive and qualitative approach) must be addressed to limit bias (Crotty, 1998; Mutch, 2005). As a constructionist "the relationship is inter-subjective with the researcher acting as a listener and interpreter of the data 'given' by the participant" (Grant & Giddings, 2002, p. 17), however, my interpretation is coloured. My 'position' is as a researcher and an educator in the bridging programme from which the participants exited. I was familiar with the university setting, the programme and former students, therefore potential participants were known to me. I was aware this may have influence on their decision to participate in the research.

My curiosity and interest in gaining a greater understanding and awareness of the influence of bridging education is as an 'insider'. Insider research is conducted by members of organisational systems and communities in and on their own organisations (Brannick & Coghlan, 2007; Evered & Louis, 1981; Louis & Bartunek, 1992). My pre-assumptions, beliefs and knowledge needed to be self-examined and made explicit as this research occurred in a familiar setting. I kept a research journal and engaged in discussions with my supervisors throughout this process to raise my awareness and thereby limit 'bias' (see also Chapter 1).

'Insider' Research and the Role of Journaling

This research sought to identify the influence of a university bridging programme within which I was employed, so it was important to consider the insider-outsider implications. Robert Merton "defines the insider as an individual who possesses a priori intimate knowledge of the community and its members" (1972, cited in Hellawell, 2006, p. 484). Keeping a research journal is one way to be reflexive and reflective (Mutch, 2005). Consideration of my position on the insider-outsider continuum of research (a shifting position) through journaling and discussions has been of considerable value in developing reflexivity towards this research. Reflexivity has been described as the interrogation of self (Wellington, 2000) and the "conscious revelation of the role of the beliefs and values … the researcher's deliberate self-scrutiny in relation to the research process" (Shacklock & Smyth, 1998, cited in Hellawell, 2006, p. 483).

My research journal enabled me to consideration of my role as an insider, record my challenges, the skills learned and gain new understandings through reflective writing. Emerging ideas were "articulated, refined, reshaped and, later, retrieved" (Mutch, 2005, p. 158). In my journaling I used three types of field notes: descriptive, reflective and analytical (Bogdan & Bilken, 2006), which enabled me to be reflective and reflexive. Problematic issues I anticipated included power differentials between myself and the participants and the concern that they might say what I wanted them to. Bringing these issues to the fore particularly influenced the design and data collection phase.

As an 'insider' I was aware of the context, papers and methods of teaching the participants had received during their time as bridging students, yet I was aware that I was also an 'outsider'. I viewed and experienced the 'bridging' setting from a different vantage point. I was not aware of the complexities of the participants current studies, and more so, I had very little knowledge or insight into the private lives of participants. I had both insider and outsider perceptions which Hellawell (2006) refers to it as continuum rather than a dichotomy. This is ideal as both empathy and the ability to distance oneself are necessary to come to a more balanced judgement (Hellawell, 2006).

There are both advantages and disadvantages to insider and outsider positions (Mutch, 2005). Petrie (2005) points out the need (particularly as a novice researcher) to be very clear about the researchers position within the research as this influences and can limit openness to new ideas and subjectivity. The potential advantages and problems of insider research are outlined in Table 4.1 by Smith, Syddall and Taylor (2005) below. Hockey (1993) also notes that insiders have a relative lack of disorientation or culture shock and that "respondents will reveal more intimate details of their lives to someone considered empathetic" (p. 199).

Table 4.1: Practitioner/insider research: potential advantages and problems

Potential advantages	Possible problems
Prior knowledge and experience of the setting/context (insider knowledge)	Preconceptions, prejudices
Improved insight into the situation and people involved	Not as 'open-minded' as an 'outsider' researcher
Easier access	Lack of time (if working inside the organization) and distraction/constraints due
Better personal relationships, e.g. with teachers, pupils	'Prophet in own country' difficulty when reporting or feeding back
Practitioner insight may help with the design, ethics and reporting of the research	Researcher's status in the organization e.g. a school
Familiarity	Familiarity

(Source: Wellington, 2000, adapted in Smith, Syddall, & Taylor, 2005, p. 32).

Making explicit my role as an insider/outsider has been to my advantage. "Knowing the self and knowing the subject are intertwined, partial, historical, local knowledges" (Richardson, 2000, p. 929). I have a greater understanding of myself and my potential influence on the research process through journaling and interactions with my supervisors who acted as 'a critical friend' to debrief with (Mutch, 2005). This self examination was ongoing and allowed me to gain clarity about my own preconceptions, and there by allow me to bracket off my own experiences (to some extent) from those of the participants (Marshall & Rossman, 2006). In seeking to study individuals and their unique lived experiences a qualitative approach was chosen (Mutch, 2005).

Qualitative Research

Qualitative research can be approached from many different theories, methods, approaches and perspectives in an attempt to employ a critical interpretive approach (Denzin & Lincoln, 2005). Embedded in this research is the notion that to explore and enhance the understanding and awareness of the influence of a bridging programme, the unique lived experiences of former bridging students will bring understanding of the phenomena. This will also engender a deeper understanding of the topic and enable greater reflexivity and understandings of the participants lived experience. Qualitative methods are much better suited to "examining the complex and dynamic contexts of public education" and the "subtle social differences produced by gender, race, ethnicity, linguistic status or class" than quantitative methods (Lincoln & Canella, 2004, p. 7). They allow the unique perspectives of individuals lived experience and constructed meanings to be uncovered and seen by gathering rich descriptions of the phenomenon under investigation.

Qualitative research methods explore the experiences of people and can reveal a holistic in-depth picture rather than specific variables or attributes (Mutch, 2005). In using qualitative methods I was not seeking 'objectivity' from a detached stance, but rather to understand the 'subjective' nature of individuals and the phenomena of bridging education in their naturally occurring states. Qualitative methods are an in-depth way to explore and capture meaning with a goal of trying to understand a point of view. "[W]hile not perfect, [qualitative research] distorts the informants the least" (Bogdan & Biklen, 2006, p. 26; see also Crotty, 1998; Mutch, 2005; Yin, 1988). The unique perspectives of participants gathered in this research through a qualitative approach enabled glimpses of their lives and experiences, and some of the contextual influences they encountered in their academic and life journeys.

Denzin and Lincoln (2005) maintain that qualitative researchers twist and turn within the politicised space examining the dynamic and complex contexts of education. This research focuses on a distinct group of people, individuals who experienced bridging education within a university. In this context, students entered the bridging programme for many reasons and with the intent to enter a Bachelor of Health Science (BHSc) programme. The unique social factors affecting each individual are complex, as is the educational environment through which they travelled. Individuals who have completed a specific bridging programme at AUT University are the focus of this research and therefore, the overarching method employed was case study.

Case Study

I have used a case study method as it focuses on providing a rich description of a bounded case, a person, group, concept, or setting (Mutch, 2005). Yin (2006) states that the case study method has strengths in "its ability to examine, in-depth, a 'case' within its 'real-life' context" (p. 111). Case studies investigate contemporary phenomenon from within the contexts in which they exist from multiple sources of data (Davidson & Tolich, 2003; Neuman, 2003; Yin, 1988). There are a variety of types of qualitative case study including, but not limited to, organisational case study, observational case study, life history, documents (personal, official or popular culture documents), family case study, community study and situational analysis. Case studies can employ various methods including interviews, participant observation and field studies. "[T]heir goals are to reconstruct and analyse a case from a sociological perspective" (Hamel, 1993, p. 1). Case studies can vary widely in their complexity, dependent on the multiplicity of 'variables'. This research sought to address the descriptive or explanatory question, 'what is the influence of a bridging programme?' in an attempt to "produce a firsthand understanding of people and events (Yin, 2006, p. 112). In this case study the features or attributes of social life are able to be highlighted and understanding of a range of facets intrinsic to individuals' experiences of bridging education can be examined. Data resulting from a case study can be used to generate theory (Marshall & Rossman, 2006; Mutch, 2005) however, that is not the aim of this research. I was seeking to identify and examine the characteristics and experiences of particular individuals within a university (an organisation) and gain an intensive, holistic description and analysis of the influence of bridging education (a single phenomenon) (Bogdan & Biklen, 2006; Neuman, 2003; Yin, 1988). The setting of clear 'boundaries' of the case under investigation is imperative to ensure the success of the study.

Bogdan and Biklen (2006) suggest that a case study is like a 'funnel'. Over time the potential 'variables' of the study are refined and specific decisions on the setting, participants or data source are made. As the focus of the study is further refined, the specific bounds and method(s) of data collection such as sites, participants, materials, topics, questions and themes are decided (Bogdan & Biklen, 2006; Cohen, et al., 2007; Cresswell, 2008). In this case, the bounded system was determined as a bridging programme at a New Zealand university that led on to undergraduate study (BHSc) in a Health Faculty (described below). The participants were former students of that programme. To determine the academic and holistic influence of the bridging programme it was deemed necessary that participants were in ongoing study. In order to create some distance and perspective between the participants, the researcher and the programme and to be able to reflect on the influence, it was determined that participants needed to have completed at least one year of undergraduate study within the Faculty. The exact number of participants was not predetermined, however, it was believed that a range of participants would allow insight into the influence of bridging education.

Setting the bounds of this research within a clearly defined context enabled me to mitigate several challenges or criticisms of case studies. They include that focusing on the meanings social actors assign to their own experiences can cause case studies to be difficult to draw generalisations from as they can lack representativeness of a social phenomenon (Bogdan & Biklen, 2006; Hamel, 1993). Considered choice of the case and clear identification of where this case and setting fits into the range of human events allows insight into bridging education (the phenomenon). Although more in-depth research would be needed to confirm the findings in other settings and cultures, by having a range of participants the concepts developed are less likely to apply only to a specific culture or setting (Neuman, 2003). Thus aspects of this research may relate to a range of readers. The broader context of the case has been made explicit with the description of the bridging programme (chapter one). While some aspects of the programme are unique to the university, many of the characteristics of the bridging programme (such as types of students, issues they encounter and the influence of the educational material) may be similar (and relatable) to a range of bridging educators in tertiary institutions. Therefore, the case has the potential to further knowledge in bridging education and related areas. The research may also be relevant in informing undergraduate educators of the experiences of bridging students in tertiary education, as the literature (see Chapter 2 & 3) shows that bridging students experience a range of significant challenges.

Research Site and Programme Background

Since 1985 Auckland University of Technology has had a range of foundation or bridging programmes targeting students who lack entry qualifications (Morgan, 2006). Each of the programmes was designed to equip students with a 'bag of tools' that would assist them in future learning (Watt, 2002). This research is situated within the Health Faculty. The bridging programme, set at NZQF Level 4, is designed for students seeking entry to undergraduate study in any of the twelve BHSc health majors outside of 'normal' entry. This includes students under 20 years who do not have university entrance qualifications (through performance in Secondary School examinations such as NCEA (National Certificate of Educational Achievement), Cambridge (Cambridge International Examinations) or International Baccalaureate. It also provides mature-aged students (over 20 years) who are deemed to lack the necessary requirements for a health degree (such as science background) a pathway. The bridging programme has open entry with few prerequisite requirements so students enter with a diverse range of ability and skill. The prerequisite requirement are: normally completion of Year 12 for school leavers; and students with English as an Additional Language (EAL), an IELTS (International English Language Testing System) score of 5.5 (*AUT Calender*, 2008).

The aim of the bridging programme is to "assist students in developing the academic literacy skills necessary to succeed at university level study" (Harford, et al., 2006, p. 176). It includes papers which credit towards one of two certificates (a 60 point certificate/one semester full time, or a 120 point certificate/two semesters full time). Successful completion of bridging papers (the number is dependant on their entry qualifications) fulfils the entry requirements for students to enter into undergraduate degree courses. The programme began in 2003 with one certificate (120 points), 180 students, five full time bridging educators and four papers. The programme has since expanded and in 2008 there were two certificates, approximately 320 students enrolled, eleven fulltime lecturers (ten who work exclusively in the bridging programme) and thirteen papers (both academic and applied).

The bridging programme offers a range of options for students including full and part-time study. All papers are offered semester one and two of the academic year, with a number of papers offered over an intensified summer school. To obtain either certificate, two compulsory papers, a human anatomy and physiology paper and a sociology based paper, must be completed. Students may have a general health focus or a specific focus on oral health. Each paper involves approximately 50 hours of class

time per semester (a two hour lecture and a two hour tutorial per week). The oral health papers also have a significant practical component. Each bridging paper was designed with specific content and embedded process focusing on oracy, reading, writing and/or examination techniques. These are designed to prepare students with the introductory knowledge required for specialised BHSc programmes. The papers and processes align with the content and assessment requirements of the BHSc first semester papers. They promote engagement with content, academic processes and the learning environment towards the acquisition of academic literacy skills required in undergraduate study.

The majority of students entering the bridging programme have clear goals of achieving an undergraduate degree qualification in one of the health majors offered at the university. The post Year 13 'group' contributes a significant number of those enrolling in the programme, although there is a wide range of ages. While some students self-select bridging papers, many are advised or required to successfully complete papers before reapplying to an undergraduate programme due to the strong science element of health focused degrees. The participants are currently enrolled in BHSc programmes.

Exact retention and completion data on the bridging programme and progression data into undergraduate degrees is not readily available. Most students were enrolled in the 120 point certificate yet many gain 'University Entrance' after one semester and so enter their chosen undergraduate degree. Preliminary research indicates that completion is approximately 60 per cent, while progression into an undergraduate degree is approximately 85 per cent of students who successfully complete bridging papers (Harford, V., personal communication November 14, 2007). Preliminary data also shows a considerable number of former bridging students are successful in completing their undergraduate degree qualification. Through gaining further understanding of the influence of the bridging programme, factors influencing retention and completion may also be uncovered (although not an aim of this research).

The Participants

Participant 'selection' is a challenge of case studies (Bogdan & Biklen, 2006). Bogdan and Biklen suggest that narrowing the topic can mean that all participants, sites or materials are studied, however, that is not possible in this research as there are over 1,000 individuals who have completed papers in the bridging programme. Consideration was given to a variety of methods of participant selection that would enable a diversity of perspectives. Self-selection was determined to be the most appropriate method for several reasons. The diversity of former bridging students makes it likely that

informants would vary sufficiently for this project. Participants who self-selected were more likely to be the most appropriate, as they had the available time needed to collect information and each participant would vary in the amount of information, insight, willingness and ability to discuss the topic (Bogdan & Biklen, 2006; Marshall & Rossman, 2006; Yin, 1988). Self-selection of participants fitted the design of this research as each individual had a unique lived experience and those who believed they had relevant information and insight volunteered.

The time of sampling was carefully considered in light of the context of the study (Bogdan & Biklen, 2006). Due to the nature of the academic year, notices advertising the research were displayed at the beginning of the semester. To 'manage' the potential variability between participants, my supervisors advised me to remain flexible until it was deemed data saturation was achieved from participants who met the criteria sought.

To obtain the most useful data participants needed to be willing insiders with a good knowledge of the topic, bridging education (Fontana & Frey, 2005). The 'insiders' in this case were former bridging students who were in ongoing study at undergraduate level for at least one year within a Health Faculty of the University. When considering potential participants both length of time in the bridging programme and the undergraduate degree programme were considered as possibly important factors to the participants insight into the research topic. It was determined that a minimum of four bridging papers over one semester would ensure that participants had a good knowledge of the programme and would be able to comment on its influence. To ensure that participants had time to integrate into their undergraduate study and have enough 'distance' from the researcher (a former lecturer) it was determined that they also needed to have completed at least one year of undergraduate study. This would also assist in mitigating several ethical concerns such as non-compulsion, as the participants have no formal contact with the researcher and issues of power and potential coercion or acquiescence (Breakwell, 2004, as cited in Cohen et. al., 2007)

The number of potential participants within this scope was significant. With over five hundred potential participants it was unwieldy to attempt to interview them all. It was anticipated (in consultation with the supervisors) that between six and twelve participants would provide a variety of responses for analysis and comparison, and to achieve some level of data saturation and consistency (Neuman, 2003). More information can always be gained but it is at the point of diminishing returns that the researcher finishes the data collection phase (Bogdan & Biklen, 2006; Yin, 1988). This

sample size is not likely to reflect all the experiences of bridging students in ongoing study, but is a point of feasibility. Furthermore, qualitative research is not designed to be generalisable for population sampling purposes (Neuman, 2003).

With clearly defined participant parameters, posters informing students of the research seeking participants were displayed around the university campus. The researchers contact details were included so those who self-selected to participate could gather more information about the project. Five participants responded to the posters and two were informed by their peers. All seven contacted me either by phone or in person and were given further information before consenting to be interviewed. No participants were excluded and the seven who responded generously informed this research.

Both written and verbal information was given to each participant prior to the interview. Verbal information on the topic and process of the research was given when participants initially approached me and again immediately prior to the interview. Clarification was given to the potential participants that they would be interviewed, seeking personal 'stories' about the influence of the bridging programme, academically and in any other way. As Smythe and Murray (2004) suggested, there was a time lapse between the initial information, discussion of consent and the interview to ensure students had adequate time to consider the topic and the implications of participation. Participants were given the Participation Information Sheet (see Appendix I) and a time to meet the researcher in a private office for the interview. Any final queries were answered and the process reiterated, consent forms signed and the interviews conducted. A diverse range of participants volunteered. Their participation was affected by the time pressures of assignments, examinations and the nature of the clinical placements peculiar to health majors, so the data collection (interviews) occurred over an eight month period.

Data Collection – The Interviews

While there are many ways to gather data from participants, it was believed that face-to-face interviews were the best way to gather data for this project. Other methods considered included: observation; journaling; questionnaires; and focus group interviews (Neuman, 2003; Yin, 2004). The interview was used "to obtain a rich, in-depth experiential account of an event or episode in the life of the respondent" (Fontana & Frey, 2005, p. 698). Interviews allowed me to gather information, discuss issues and interact more directly with participants which allowed their subjective experiences and attitudes to surface on the topic of the influence of bridging education as questions were asked (Peräkylä, 2005).

Fontana and Frey (2005) assert that asking questions and getting answers is fraught with a residue of ambiguity due to the differences in the ways individuals use and interpret language. For this reason, the interviews occurred individually, in a face to face setting. Validity and reliability in interviews was achieved by minimising bias (Cohen, et al., 2007). The sources of bias were the characteristics of the interviewer and respondents, as well as the substantive content of the questions (Cohen, et al., 2007). Individual interviews were chosen to allow participants to use their own language to fully describe their experiences and not be influenced by others. While I had some prior familiarity and understanding of the programme, I framed the questions and my responses openly, not assuming shared meanings although I was aware there were some commonalities (Mutch, 2005). This enabled me to seek clarification when I did not understand, interpreted a point differently, or when the verbal/non-verbal language was incongruent.

Interviews were one-off and no time constraints were placed on the participants so that they could continue as long as they felt they had relevant information to impart. One participant also emailed a further comment one day after her interview, to add to her contribution as she had thought of it after she left and believed it was important. This was also included in the data. As a stakeholder in the bridging programme I was not a 'neutral' interviewer, but rather an empathetic one (Fontana & Frey, 2005). When the students were talking about the bridging programme or their undergraduate degree programme, I was familiar with much of what they were discussing, so this enabled a greater rapport, understanding and reflexivity. As an 'insider' I did not want my pre-assumptions to reduce or constrain the scope of the participants' responses and so I determined a semi-structured style of interview was most appropriate (Cresswell, 2008; Marshall & Rossman, 2006; Petrie, 2005).

Semi-structured interviews fit between structured and unstructured interviews, allowing participants to freely frame and structure their responses based on a few general topics (Marshall & Rossman, 2006). In a structured interview all participants are asked the same series of pre-established questions and there is little room for variation. The aim is to capture precise data that is codable to explain behaviour within pre-established categories. Unstructured interviews attempt to "understand the complex behaviour of members of society without imposing any priori categorisation that may limit the field of inquiry" (Fontana & Frey, 2005, p. 706). Semi-structured interviews create a negotiated text, enabling the collection of a large amount of data on the topic in a relatively short period (Neuman, 2003).

Each interview was structured around predetermined questions, this "allows the questioner to provide encouragement, ask probing questions, and request additional information" (Charles & Mertler, 2002, p. 39). The questions were a guide for the interview process and allowed for a flexible, yet consistent succession of interviews (Petrie, 2005). By using a semi-structured interview I was able to be part of the interaction (with potential influence), however, it was non-restrictive and enabled the participant to retain a level of control and to direct the interview as they determined.

Semi-structured interviews allow participants to tell their stories or narratives and talk about their experiences based on the research questions, allowing the researcher to learn about participant's perspectives, experiences, attitudes and opinions (Alvermann, 2000; Clandinin & Connelly, 2000). Clandinin and Connelly (2000) state that it is "experiences that make up people's lives, both individual and social" (p. 20) and that narrative is a way of understanding experience. Cooperrider and Whitney (2000) note that storytelling is a means of "conveying values and giving life to the people … as people tell the stories of their work lives they place themselves into a relational web of values and meaning" (p. 239). Our lives are rich with narratives. Narrative research is based on the in-depth autobiographical interviewing of participants, listening to them talk in their own terms about the significant event in their lives (Smythe & Murray, 2004). By allowing participants to discuss their experiences, I expected rich narrative data to eventuate, enabling the influence of the bridging programme to be uncovered. This research draws on narrative but is primarily a case study. "Participants in narrative research are asked to share more personal and identity-laden data than in traditional, nomothetic research" (Smythe & Murray, 2004, p. 185). This raises particular ethical considerations which will be discussed later in the chapter. Rapport between researcher and participant can influence the quality of the narrative and must be nurtured.

"The heart of our social and personal being lies in the immediate contact with other humans" (Peräkylä, 2005, p. 874). When participants came for their interview, I first wanted to both put them at ease and develop rapport. The environment was quiet, comfortable and free from interruptions. Participants were offered a drink (tea, coffee or water) to create a relaxed atmosphere where a 'conversation with purpose' could be held, rather than give the impression of a formal interview (Marshall & Rossman, 2006). This was aimed at establishing rapport with the participants and to ensure the success of the interview by gaining trust, which is essential and once gained is fragile (Fontana & Frey, 2005). Before the formal interview I reiterated the research process

and purpose to ensure understanding. They were informed the interview would be audio taped and the information sheet was reviewed. Informed consent was gained in writing and discussed as an ongoing mutually negotiated process between participant and myself (Smythe & Murray, 2004). Because of the anticipated depth of self-disclosure, participants were informed they may withdraw consent at any time up to the data analysis phase. Following some informal conversation and the preliminary details, the interviews began and the questions were posed.

The scope of the inquiry was set around identifying how the bridging programme had and continued to influence the participants. Questions were posed to gather narrative (experiences and perceptions) and to elicit holistic perspectives (rather than fragmented) (Atkinson & Delamont, 2005). I wanted to capture the participants lived experience including areas related to their academic studies, personal and social lives which they identified as pertinent. I was also aware that aspects of social action and organisation may be raised, although they were not specifically sought. Petrie (2005) noted that the interviewers themes, when highly structured, limited the participant's ability to contribute beyond what was predetermined. Thus, the semi-structured interview questions were formulated to enable the participant's point of view to be voiced without too much direction or control by the researcher.

The questions were printed and able to be seen by both the researcher and participants throughout the interview. At the outset, the participants were reminded of the main research focus – the influence of the bridging programme. The main research question, *how does bridging education influence students?,* is both historical and descriptive in nature (Charles & Mertler, 2002). It sought to depict participants as people and explore conditions, situations and events experienced by participants in the past and as they currently exist. Through the lens of the past and the present, it was hoped that the influence of the bridging programme could be holistically identified. Beginning with general questions I then moved on to more specific ones, as outlined below:

Tell me a little about yourself (age, ethnicity).

Tell me about what papers you did in the bridging programme.

Tell me about your current study (programme and length of time).

Describe moments when you became aware the bridging programme influenced you, academically, personally, and/or socially.

Are there any other ways the bridging programme has influenced you?

The importance of listening, fully attending to the participant and giving them complete attention, clearing my mind of preconceptions and thoughts (Neuman, 2003; Petrie, 2005) was foremost in my mind during the interview process. Probing and clarifying questions were asked inconspicuously throughout the interview to check the veracity of the data (Fontana & Frey, 2005; Petrie, 2005). Aware that my manner, language, encouragement (verbal and non-verbal) and the seeking of clarification could potentially influence participants and vary their responses, I tried to remain interested but impartial (Charles & Mertler, 2002; Fontana & Frey, 2005). I wanted the participants to lead the conversation. I tried to avoid a real conversational situation where I answered questions or gave my opinion, particularly as this may have influenced the participant's responses (Fontana & Frey, 2005). Throughout the interview all further questions were to clarify participant's responses and gain further insight.

Like Petrie (2005), I was aware that planning and completion of the first interview were imperative. The idea that "[p]articipatory consciousness may occur more naturally if this is a conversational dialogue" (Petrie, 2005. p. 117) eased some of my trepidation as this was my inaugural induction to research interviews. I was aware of my novice status and the potential for bias. Both my supervisors and I believed the questions to be robust and broad enough to give clear and accurate data. The possibility of using the first interview as a pilot was mooted by my supervisors and the possible need to alter the research question(s) was raised. Following completion of the first interview and discussions with my supervisors, the questions appeared robust for several reasons. The participant was aware of the main question prior to the interview and so had time to consider her experiences. The simplicity of the research questions allowed for rich discussion in a breadth of areas, including but not limited to, academic, emotional and social aspects of the influence of the bridging programme. The questions remained unaltered and the interviews continued as participants approached me.

Each of the seven participants had a one off individual interview between late 2006 and mid 2007 during the academic semesters. Each interview was recorded in a private office on an audio-tape and was between 25 and 45 minutes long. At the conclusion of the interview, a $20.00 bookshop voucher was given to each participant as a koha (or gift) (Mutch, 2005) to thank them. This small token was for the time the participants had spent both prior to and during the interview, as well as later verifying their transcripts.

Transcripts and Data Analysis

Audio tapes were used to capture the data as it was deemed to be more acceptable to participants than video recordings. "Video and audio recordings provide the richest possible data for the study of talk and interaction today" (Peräkylä, 2005, p. 875). Video and to a lesser extent audio allow the subtleties of non-verbal communication to be revisited. The audio taped interviews were transcribed by the researcher into word documents. The audiotapes and subsequent transcriptions did not identify participants as individuals and the records of each interview were stored securely in a different location to the consent forms for ethical purposes. Transcription occurred within a week of the interview and then participants were asked to check their veracity and accuracy.

Prior to data analysis, participants verified their transcripts and the reporting of their information to ensure they accurately reflected themselves and their interview (Mutch, 2005; Smythe & Murray, 2004). They were informed that they were able to alter the transcripts to more clearly reflect what they meant if they found errors, however, none of the participants altered the transcripts and all agreed they were a true and correct record of the interview. This enabled the authenticity of the data to be assured (Neuman, 2003). As each participant returned their transcript, thematic data analysis occurred.

A form of content and thematic data analysis was used which summarised and reported the participants data and their messages (Cohen, et al., 2007). From dwelling with the rich source of data, emergent themes were identified and then analysed using the method outlined in Mutch (2005). Thematic analysis involved the following processes: browsing; highlighting; coding; grouping and labelling; developing themes or categories; checking for consistency and resonance; the selection of examples; and reporting the findings (Mutch 2005, pp. 131-132). The analysis of the qualitative data was primarily logico-inductive, its purpose to discover patterns (Charles & Mertler, 2002) and coding was completed by hand (Cresswell, 2008). A preliminary exploratory analysis was undertaken to obtain a general sense and understanding of the data where I made notes (in my research journal) and thought about the organisation of the data (see Cresswell, 2008 and Marshall & Rossman, 2006 for a discussion of analytical memos). Then, using the method outlined by Mutch (2005), patterns and themes were identified and taken from each participant's data. Links, recurring and intersecting themes between participant's stories were also identified to ensure consistency and resonance. Points of difference were also noted and considered.

Each individual's interview and transcript data was both listened to and read multiple times. I immersed myself in the data attempting to identify the participants key messages, focusing on the words they used. The structure of the narrative, the ways in which participants talked about themselves and the influence of bridging education and any possible conflicts and contradictions were noted, considered and reflected upon (Bogdan & Biklen, 2006). Themes were organised into major and minor themes and in some cases unexpected themes (Cresswell 2008). Themes were then clustered into categories and the patterns analysed to create the framework discussed in Chapter 5, where the data has been used extensively to speak for itself.

The interviews were analysed as a separate or individual case and then the themes were analysed across cases. This process considered the first level of analysis being the individual, thereby respecting the integrity and wholeness of each individual (Cohen, et al., 2007). The second level of analysis is across cases in order to look for "themes, shared responses, patterns of response, agreement and disagreement, to compare individuals and issues that each of them has raised, i.e. to summarise the data" (Cohen, et al., 2007, p.467).

Throughout the research process, a range of ethical issues were considered.

Ethical Considerations

In both the design and execution of this research, careful consideration was given to the ethical issues affecting this research and the participants. Ethical approval for this research was sought and gained from the Auckland University of Technology Ethics Committee (AUTEC) when first presented at their meeting on 10 April 2006 (Ethics Application Number 06/62), subject to minor wording changes on the Information Sheet and the advertisement. Amendments were confirmed on 5th May 2006 and approval was confirmed for a period of three years.

Due the breadth of the research question and my position of power (as researcher) I wanted to ensure all participants were treated with consideration, fairness and respect. As information (data) was gathered from participants, their rights and the rights of possible third parties were foremost (Mutch, 2005; Tolich, 2001). Ethical issues considered included informed consent, right to privacy, confidentiality, anonymity, protection from harm (emotional, physical or other), the relationship between researcher and participant and the veracity (truthfulness) of the researchers reports (Davidson & Tolich, 2003; Mutch, 2005; Neuman, 2003; Tolich, 2001).

Charles and Mertler (2002) identify the protection and confidentiality of participants as crucial to the research process. Protection from physical, mental and emotional harm is a right of research participants. While there were perceived to be no direct risks to participants as they were asked reflect on past experience (the bridging programme) and how it may have influenced them, "it is often impossible to forecast with any degree of accuracy what will happen during the data gathering phase" (Smythe & Murray, 2004, p. 177). The potential risks of the research were disclosed to participants both verbally and in writing prior to gaining consent for participation. It was acknowledged that the process was emergent or discovery based and therefore that in telling of their experiences, memories of events which occurred related to their story may surface which may require further support. Participants were made aware that Health and Counselling services at the university were available for if necessary.

Anonymity between the researcher and participants was not possible with this research, however, confidentiality and privacy was and will continue to be ensured in all written and verbal presentations of the research. Access to the consent forms and original data is only available to me and my supervisors. Participants retained a degree of control over the information that was presented about them, as they saw and approved the transcripts and knew how the data would be used and published. In all documentation pseudonyms have been used to ensure that individuals cannot be identified.

The relationship between the researcher (as a prior lecturer) and the participants was also identified as possibly 'problematic' due to the possible level of disclosure of personal information and issues of power related to my role in the university. The potential risk of exploitation and/or betrayal by either the researcher or the participants current lecturers was deemed to be negligible as the research related to a programme the participants have completed and exited. In order to protect the privacy and anonymity of participants and any third parties in their narrative, every effort was made to ensure that identifying information was withheld (Smythe & Murray, 2004).

A broader issue is that of beneficence, the role of research which seeks to acquire knowledge that increases understanding, promotes opportunities and advances the broader community (Charles & Mertler, 2002). While this case study was set within a specific tertiary context, others in tertiary and similar adult educational settings may be able to gain further understanding of the influence of bridging programmes as they identify with the similarities of participants shown through the data and the discussion of the findings. Credibility of the data is ensured as the findings resonated with the case

(and my experiences); data was triangulated through the use of seven participants; and verification occurred through the return of transcripts and findings (research summary) to ensure there was a fit with their own understandings.

As with all qualitative data, the interviewer interprets the data gathered in the interview to some extent, thus the interview is not a neutral tool (Fontana & Frey, 2005, Peräkylä, 2005). Participants were offered a research summary at the end of the data analysis phase and they reported favourably on the way data was reported and the level of anonymity.

Concluding Comments

As a bridging educator I have an interest in gaining further understandings of and seeing improvements in bridging education and the programme within which I teach. I believe meaning is socially, culturally and historically situated, constructed and negotiated. Through a qualitative approach, this research sought to uncover the lived reality and constructed meanings of the participants with the use of a case study enabling a unique context to be examined.

The micro-sociological nature of a single case study was mitigated by comparison of seven cases within the broader case study design to gain perspective. Each participant was treated respectfully in terms of their own holistic case narrative. This research was not attempting to be representative, but identified a defined case within a university.

Methodological rigour and trustworthiness (Marshall & Rossman, 2006) was ensured by gathering data from multiple sources (seven participants) through individual semi-structured interviews and the awareness of the researcher herself through discussions with her supervisor and journaling. While I did have some ideas regarding the influence of the bridging programme, this study sought to explore, describe and explain the phenomenon from the participants perspective. My personal ideas were identified and 'bracketed' through research journaling and discussion with my supervisors. This ensured the description, understanding and explanation of the phenomena from the participant's point of view was and remained the focus of this inquiry. Immersion in the data and subsequent data analysis, the generation of themes and categories led to the findings (Chapter 5). Finally, the ethical considerations upon which this research was founded were discussed.

In the following chapter, the rich qualitative data gathered was outlined in the findings.

Chapter 5: Findings

> Making sense of others' realities, listening, sifting, reading, re-reading, moving to and fro. Each time I listen and consider I am changed, each experience is unique. Quotes from Carl Jung (2001) *Modern man in search of a soul* fit how I feel! "The meeting of two personalities is like the contact of two chemical substances: if there is any reaction, both are transformed" (pp. 49-50). "A shoe that fits one person pinches another; there is no recipe for living that suits all cases" (Jung, 2001, p. 62). NO RECIPE! Making sense to me, filtering, organising, making meaning. (Personal research journal entry, August 17, 2007)

Overview

Seven former bridging students inform this research aimed at identifying the influences of a bridging programme. Research data was gathered through individual semi-structured interviews based on the experiences and perceptions of participants. The seven female students interviewed were of a range of ages, ethnicities and backgrounds. At the time of the interview, the participants were enrolled in four different programmes within the Bachelor of Health Science (BHSc) which are not specifically identified to preserve anonymity. The participants were initially asked to tell me about themselves and then asked how the bridging programme had influenced them. Because of the openness and breadth of the question the participant's responses varied, however, there was one resounding similarity; the bridging programme had an overwhelmingly positively influence, academically, personally and socially. For some participants, entering tertiary education also had unfavourable or challenging influences.

"Many a researcher would like to tell the whole story but of course cannot, the whole story exceeds anyone's knowing and anyone's telling" (Stake, 1996, p. 240). Thus, substantial excerpts from participant's transcripts are used to inform this chapter. The data is provided verbatim from the participants and so some variation in terminology and errors may exist. Each participant was introduced (using pseudonyms). A description of their experiences and perceptions of the influence of the bridging programme (which most refer to as the 'certificate') both at the time and ongoing and as an undergraduate student was outlined. Influences outside academia are also outlined. The chapter is concluded with some reflections made in my research journal about the participants and the findings.

Participants and their Background

Lisa

Lisa is a European New Zealander who is married with no children. While in her thirties she commenced the bridging programme following the sale of her family's retail business, which Lisa had been highly involved in. She wanted a change, *"I thought I should go get an education since I dropped out of school"*. Initially she was unsure about what to do enrolling *"in eight courses at AUT University and because I'd been out of school for sixteen years they said I had to do the certificate"*. Lisa completed four bridging certificate papers and commenced a BHSc clinical major, however, the programme was not what she had expected and so transferred into another major which she completed in 2007.

Susan

Susan is a European New Zealand teenager who started the bridging programme when she was seventeen years old. After completing Year 13 Susan did not meet the University Entrance criteria for a BHSc and was required to complete bridging certificate papers. Susan is currently enrolled in a BHSc clinical major and at the time of the interview was in her third semester of the programme.

Rebekah

Rebekah is a Chinese immigrant who following completion of a tertiary diploma in Japanese at a Chinese University moved to New Zealand to pursue her career. She has lived in New Zealand for five years, with the first two years spent in Hawkes Bay where she attended a language school to learn English. *"Because when I came here I had not any words about English. ... for me it is really hard when I came. I came knowing nothing"*. While Rebekah was taught English at school in China, she said *"the thing is we not really serious about it"*. As a New Zealand resident with a growing command of English, she wanted a change of career and so enrolled in and completed eight papers in the bridging programme *"which is really really useful for my study right now"*, a BHSc clinical major.

Kiri

Kiri is a Māori woman in her mid twenties who grew up in both rural and urban areas of the North Island. Following her secondary education she found employment. Due to her

sister's influence and encouragement she enrolled in the bridging programme. This was a significant event for both Kiri and her larger whānau as "*I am only the second person in my family to do a degree. My sister was the first, she did physio here*". Kiri was in a stable relationship with a toddler when she began the bridging programme, but is currently a single parent. She successfully completed eight papers in the bridging programme. Initially, Physiotherapy was her choice but due to her sister's advice and a desire to positively influence her local Māori community, she is completing a different double BHSc major.

Rose

Rose is a New Zealand woman in her thirties who at the time of the interview was married with four children aged one to thirteen years. "*My school experience was abysmal. I left school at fifteen without anything. Six weeks after my fifteenth birthday, I left school and went to work at Hannah's for $2.40 an hour. I hated school and it hated me*". Through a mix of Correspondence School and returning to her local high school when 18 years old, Rose passed five 'School Certificate' subjects (Year 11). "*Then I moved to town and education went out the window. ... I was brought up with the whole 'men are bread winners and women pop out babies, school is wasted on girls! My mum was living in a time warp*". Prior to the bridging programme Rose had been employed in "*pretty menial jobs, nothing really interesting. I had quite a low self-esteem and I didn't think I was capable of doing much*". While unemployed and on the sickness benefit she was encouraged by a friend to consider what she really wanted to do. Following some thought and internet research, she applied for BHSc clinical major and was later enrolled in the bridging programme.

Ann

Ann is a mature aged international student. She trained in nursing in her own nation and had worked internationally. While English is her second language, she felt some anxiety coming to study in English, "*from the nursery I studied English but it is totally different from Western*". Her purpose was to complete a BHSc major to further her dreams of setting up a health clinic in her nation. She left her husband and family behind to complete her study in New Zealand. As English was her second language, she chose to complete the bridging programme (eight papers) and thus not be required to complete an IELTS to gain University Entrance.

Julie

Julie is a mature, married woman with teenage children and was employed prior to commencing study. On completion of her secondary education she found a job and later married. She had always wanted to be a nurse but *"when I was younger, but I got distracted"*, then her priority was her children and *"they came first"*. With her youngest child entering College, it was time for a change. With a rekindled desire for study and she began her journey to gain a BHSc degree.

Emerging Themes

The findings are discussed based on three main frames in which the participant's identified the influence of the bridging programme. First, those that began during their enrollment in the programme. Secondly, the ongoing influence while enrolled in an undergraduate degree programme, and finally, the influence on areas outside academia.

Influences that Began During the Bridging Programme

The route and emotions of becoming a bridging student

The process of enrolling in the bridging programme was different for the participants due to their variety of life circumstances (personal contextual influences). Six of the participants acknowledged their entry route and discussed the influence it had on them, or the way they felt about it as they entered the bridging programme.

Kiri had prior knowledge of the programme. Her sister was a graduate of the university and had advised her to complete the bridging programme prior to enrolling in the degree and so she chose to directly enroll in the bridging programme. She stated:

> *If I had applied to get into a degree I think I would have got in because of my age and stuff but I really think I would have been unsuccessful and just dropped out so I am really grateful that I did the certificate even though it has put another extra year on things.*

Others sought advice from the Faculty Programme Information Advisor to get information on available programmes and were advised to enroll in the bridging programme. This was due to the due to length of time out of study or lack of educational or science background. Lisa noted: *"because I'd been out of school for 16 years they said I had to do the certificate. ... I was kind of like fair enough because I wanted to do my degree"*. Julie also spoke with the Programme Information Advisor about her options and commented that she had suggested Julie do the bridging certificate for two

reasons: "*one that I didn't have University Entrance even as an adult student and I must have indicated to her that I lacked confidence perhaps because I hadn't studied for so long*". Ann was not a confident English speaker and so was also advised to complete the one year bridging programme as if she obtained grades of a B average the university would not require her to complete an IELTS. "*Even though for years I had lived out of the country they were speaking American English, but still I had a really hard time here because it is my second language*".

The two remaining participants applied for an undergraduate degree programme and were rejected. However, they were advised to enroll in the bridging certificate and on successful completion of papers to re-apply for their programme of choice. Susan said:

> *I had hoped to get right in but I'd failed Biology so I had to do the certificate and get an 'A' in HSF* [Human Structure and Function, a bridging paper]. *... When I found out I didn't get in, I was real pissed off and cried. Then they said 'But you can do the certificate over six months or a year'. I was like yeah, that seemed like a good idea. ... At the end of it* [six months], *I was gutted that I had got into the degree but also happy, because I wanted to finish it* [the certificate] *off.*

Rose had a similar experience, stating:

> *I was a bit annoyed at the time because I wanted to do the degree straight away but I am so glad I was made to do this course first, because I would be floundering and not know if I was Arthur or Martha. But it gave me that foundation. It did what it was meant to do.*

As the participants began the bridging certificate their initial feelings were varied and related to the route of entry. Some were philosophical about the requirement to complete papers and others felt nervous or frustrated (as noted above). The transition to university study was also a challenge for some. Lisa said: "*I was quite nervous about coming to uni, because I hadn't been at school for so long and I'd dropped out. I didn't know what to expect*". Julie said "*I'd never put myself first before so that was a really hard hurdle to get over originally. I hadn't studied for 32 years before I came here*". Julie also said that starting the certificate was "*taking on a challenge of doing something I'd never thought about doing – trying new things. In the past, I would try new things, but it would take a lot of time to actually do it!*" Ann stressed the challenge of being a second language student: "*the first three months honestly speaking nothing was going into my head. Everything was going over the top of my head because of the accent*".

The initial challenges and emotions of becoming a bridging student were soon replaced by the reality of classes, study and learning new ideas and concepts.

Understanding learning processes and gaining learning skills

The bridging certificate actively attempts to familiarise and engage students with the university environment both physically and academically. Specific activities are organised early in the programme to orient students to the environment and resources. Rebekah commented: *"When I did the certificate I'm already in the environment with degree students. It's really good. I've got support. I know what I am doing and where to go in the university. It's one of the most useful things I have learnt"*.

Both content knowledge and academic learning skills (specific embedded processes) are a key part of each paper in the bridging programme. They were identified by participants as being influential. Several participants made direct reference to differences they experienced in the bridging programme to prior secondary and tertiary learning experiences. Julie mentioned: *"The way that I learned at school was so different – there was a lot of rote learning back then"*. Rose compared the bridging programme to another bridging programme she had previously attempted, claiming:

> *I started the Wellesley programme over at Auckland Uni years and years ago even before I had my first baby. And that wasn't as good as the one here. It never focused on how to learn, how to write essays, how to reference, how to look for things in the library. It was just more like, this is the content of this paper and this is the content of this paper. The bridging certificate is about learning the processes. It's not about the content, it's about the processes and if we can master the processes, then pretty much we'll do alright with the content. It's not necessarily knowledge; it is knowing how to learn.*

Susan commented that it was both the content and the learning skills that were helpful: *"I hate study actually, but the knowledge part was good. We need the base knowledge before we can practice it. The skills were helpful as we could write about any subject and turn it into anything"*.

Lisa described the process of learning the required skills as follows:

> *The University is expecting us to know academic stuff and I haven't come from an academic background. I don't know it at all! I was just like - ok? On the certificate we just got a better understanding of the whole system. ... It's all that kind of background that the University expects us to know. ... It's all the stuff they expect us to know without ever – oh apart from the certificate, without anyone ever teaching. ... When I have to write an essay on something ... I've actually got to find someone that agrees with me. That kind of stuff they don't teach us in the degree. That's kind of weird.*

Kiri described some of the specific knowledge she gained: *"I had never written an essay before, I had no idea what referencing was. I didn't even know what a cell was*

[laughing] *so it definitely, definitely helped me to get the basic knowledge to go on into a degree".*

Rose stressed the gains she had from the bridging programme: "*I feel confident just to be able to talk to other people*". She also asserted:

> *What the bridging papers did for me was it taught me how to read the question correctly. The essays that we did weren't that deep, they weren't that far reaching. ... The certificate helped with the self-directed learning a lot! All the research we were made to do, finding things out for ourselves with being able to talk to the lecturers so easily. ... It gave me a foundation. It gave me skills, like academic writing, research, APA etc.*

Ann stated: "*We learned computer lab, library searching and how to go into journals. That was the same, we are using e-journals still. It was good*". She also believed that some of the specific skills were beneficial both in the bridging programme and in her degree:

> *Literature review it was 100 per cent helpful. Now in degree course every time we do a literature review, so it was my basic. ... If I hadn't done the literature review at that time I wouldn't know how to do skim reading and make my own words. Now I know how to do that and for me it is very easy, so thanks to the certificate I know how to do it.*

Susan also spoke about the significant growth of her academic skills despite the fact she had just left high school:

> *I had no idea how to write essays, I had always failed them at school and the critical thinking, I had never done that before. ... In high school they would give us a topic and didn't help us with it at all. They would basically give us a classroom file and ask us to get on with it. Here, the certificate lecturers went through the structure: the introduction; what we need etc; and how to write the conclusion. I tried it and could do it. But I actually got an 'A' for an essay for the first time in my life! I was amazed that I had actually learned to do something.*

Rebekah said *"Friends make my study much easy".* When asked how, she remarked: "*I have learned one strategy from the certificate which is using study groups, it's really good and a huge support and like the lecturers always suggested to us to have work proof read by students in the same class*".

There were a wide variety of skills that participants stated they learned or honed as bridging students. These skills have been invaluable to the participants as students in undergraduate degree programmes. They include aspects of management of self, others, information and of task as described by Bennett, Dunne and Carre (1999) (see Table 3.1

in Chapter 3). These skills were embedded in the programme and taught alongside the content knowledge. The processes of learning and expectations were made explicit. Alternate ways of working were given, such as having peers check work and study groups. These were scaffolded in the classroom by educators. The range of skills identified by participants is shown in Table 5.1 below (source adapted from Bennett, et al., 1999).

Table 5.1: Skills learned and/or developed during the bridging programme

MANAGEMENT OF SELF	MANAGEMENT OF INFORMATION
• effective time management • self directed learning and study • take responsibility for own learning • active listening and conversation skills • develop and adapt learning strategies • use learning in new or different situations • plan/work towards long-term aims and goals • purposefully reflect on own learning • cope with stress Inferred but not stated: • set objectives, priorities and standards • use a range of academic skills (analysis, synthesis, argument etc) • show intellectual flexibility • clarify with criticism constructively	• awareness of the resources in the university environment • use appropriate sources of information (library, research/data bases, systems, people etc) • reading and understanding the paper requirements • reading techniques (such as skim reading) and paraphrasing skills • brain storming and mind mapping • critical thinking skills • use appropriate technology • present information/ideas competently (orally, in written form, visually using verbal and non-verbal skills Inferred but not stated: • use appropriate media • handle large amounts of information/data effectively • use appropriate language and form in a range of activities • interpret a variety of information forms • respond to different purposes/contexts/audiences • use information critically • use information in innovative and creative ways
MANAGEMENT OF OTHERS	MANAGEMENT OF TASK
• work productively in a cooperative context • take the role of chairperson • learn in a collaborative context • assist/support others in learning • group strategies for study (study groups, peers proof-reading work) • adapt to the needs of the group • take initiative and lead others Inferred but not stated: • carry out agreed tasks • respect the views and values of others • defend/justify views or actions • delegate and stand back • negotiate • offer constructive criticism	• identify and understand key features of assessments (such as the question and marking schedule) • set and maintain priorities • plan/implement a course of action • study • examination techniques • group presentations • use and develop appropriate strategies • academic and formal writing • reference using APA style • complete specific academic assessment tasks, such as essays, literature reviews and examinations. Inferred but not stated: • conceptualise issues • identify strategic options • organise sub-tasks • assess outcomes

The learning process and formative feedback

Significant to the learning process within all of the bridging papers is the skills embedded in learning activities. Several of the participants spoke of this as being particularly useful. Ann spoke of the process of learning how to read and summarise literature which was learned in a class activity: "*Reading time, learning, then writing, then the teacher says this group come and we will stand and say about our literature. Very fast and the first time the teacher said well done.* [Smiling and laughing]. *It was very helpful*".

Opportunities are given for bridging students to submit work and receive formative feedback prior to the grading of the assessment by the lecturer or in class by peers. Rose identified a link between reading and understanding the learning outcomes, assessment tasks (found in the paper prescriptor) and the marking schedule in enabling her to complete the task:

> *Facts and figures are one thing, but being assured that we are going through the right process is the basis of it, knowing we have got all our bases covered with our essay. Being able to read the paper prescriptor, knowing the marking schedule, it's all that, that is so important.*

Lisa spoke of the different approaches to assessment, comparing the opportunity for formative feedback in the bridging programme and her degree programme:

> *And even going through, the certificate lecturers were picking us up on stuff, not failing us but saying this is wrong and letting us know before it got marked. ... In the degree they pick us up and fail us on stuff without letting us know.*

The lecturers

The support and encouragement of bridging lecturers was identified by all the participants as being a significant influence academically and personally. Speaking of the bridging lecturers Lisa noted: "*We got more contact which is nicer, we don't get that in the degree. ... They were not holding our hand and walking through it unrealistically but they were there if we need to talk to them*". Furthermore, supporting Lisa's perspective, Susan also commented on the approachability of the bridging lecturers and a difference she experienced when an undergraduate student:

> *The certificate teachers were good. They were happy most of the time and they liked to encourage us most of the time ... The certificate lecturers were always willing to help us and wanted to talk with us. ... It is so different now. Some of the teachers on the degree course don't remember our names whereas you guys would always remember us and call out our names.*

Discussions with bridging lecturers about the importance of study and strategies lingered in the minds of some participants. For example, Susan noted: "*One of the lecturers would tell us that we won't pass if we don't study. No point in being here otherwise. I was definitely encouraged to study as I didn't want to fail and have to repeat the course*".

Several participants spoke at length of the bridging lecturers approachability and the connections they made. Rebekah commented:

> *When I did the certificate, I felt more comfortable, I had many support from you and other teachers and tutors. Now it is more based on ourselves. They don't give many support and I understand why. But it's really hard. ... In the certificate it was good, not too much support, we only got some extra support, but the environment is exactly right*

Rose agreed with Rebekah stating it was such a relief to know that there was support:

> *It's taken a lot of fear away, knowing that the lecturers are not out to get me like I thought. Because I had been at university before, at the University of Auckland and they were not very supportive. I started doing a BA in '96, no, '97 and I was an adult student then, but it was scary, it was horrible. The difference is the fact that the bridging lecturers were and are here for us. One of the first things we learn is where the certificate lecturers are located. And we always have all their phone numbers. Honestly, the friendly approach and the way the certificate lecturers all said 'if you need anything, come and see us, we are here to help you'. Of course that was said a couple of times at Auckland, but I did not feel it. Well, whenever I went with a question to one of my tutors at Auckland, I found whether it was me or them, but I felt like I was inconveniencing them. But with the certificate lecturers I always felt like no question was a stupid question and you guys were very approachable. Even the way the certificate lecturers would wave at us and say hi as we passed and some even do it now. Not that we were mothered, but I did feel like a little duckling, I felt like I belonged.*

In another interview Ann spoke of the emotional support she experienced during a personally difficult time stating (and I quote at length):

> *It was really hard to find a best friend or study group for me ... maybe because of my accent. I was really sad to move from my family. ... I was feeling lonely and I would sit at home by myself I don't want to mingle with anybody. But at times I used to speak with a lecturer about the hostel and my situation and we would talk. 'It's all right, everything is good, it is a big jump for you' she said. And I said I didn't realise New Zealand would be so hard for me. Since I found church and started my worshipping everything started going better. Yes the bridging lecturers are helpful, we can ask how many times we want, but honestly, I am not a person to ask so many times even though I don't know this. I just would keep quiet because somebody else would ask in my place and I will hear it. And why should I ask again the same question. ... The teachers were really waiting for us to ask*

questions. Especially the HSF lecturer, she is a very good teacher, she says always 'use me, use me, you may not get this chance in the degree' and it is really true. Of course that basic knowledge I now have. I say to others now you are getting the basics and you will not get in the degree. You have to come back to the teacher to clarify, make use of them very well. And all the notes, I still keep them. Sometimes I revise that, it's really clear information for me and I understand it. The lecturers are very good teachers, very approachable. The bridging lecturers were all very free, we can ask anything to them, it is an international truth. Definitely, 100 per cent truth. We would get that love support and tapping on the shoulder 'it's alright student you come, we are here to support you', that you only hear that in the certificate.

Julie echoed the comments about the support received from bridging lecturers and how that continues to influence her current studies claiming:

I really appreciated the way the bridging tutors made themselves available and offered help. Thinking about that, when they said they were available I believed they were really wanting to be available and made themselves available, even if it was hard. And we don't often get it said now but when they do I take it up, which I don't know that I would have done without the certificate. It's that confidence thing to ask a question and no question's a dumb question – and I learnt that there too!

Class size

As shown by the quotations above, the importance of having time with the lecturer and the opportunity to ask questions, clarify the learning and re-explain concepts was important to all the participants. Like Rebekah who stated above that she did not feel supported in her learning as a degree student, Lisa also noted that in the degree things were very different, due in part to the significant role of lectures:

They just dump everything on you, like in all the lectures and that's a really hard way to learn. In the certificate we had lectures and tutorials, we started to learn and could read through and had time to understand everything.

Tutorial classes, with approximately 20 to 25 students, are an important part of the bridging programme to ensure the ideas and concepts are understood and can be applied. Speaking of her time as a bridging student, Rose noted: "*I felt like I belonged there and was welcomed there. Maybe it was the size of the class 'cause I am in a very large class now. The small classes in the certificate really helped*". The confidence to ask questions of lecturers which all the participants spoke about occurred in lectures and tutorials as noted by Ann: "*Of course if I don't know that properly then somebody else in the tutorial would ask and I would hear*".

Increased confidence and altered beliefs

Participants stated that their feelings about themselves and their academic ability altered over the time they studied in the bridging certificate, particularly noting an increase in confidence. For example, Lisa claimed: *"The certificate changed the way I thought about myself. ... It boosted my confidence to believe in myself"*. Julie agreed with Lisa's comments saying: *"I'm really glad that I did the certificate course first because it gave me the confidence to believe in myself"*.

The confidence Rebekah gained included her ability to talk with and engage other students in discussion:

> *For the other students this is their own language, own home town, their own country, so they are not like me. I would look down on myself because I feel I am an outsider and jump into the place and I feel I am never better than the other person. The certificate helped me improve to talk to others.*

Rose stated that she entered the bridging programme with low self-esteem, but her experiences as a bridging student significantly changed long held beliefs, for example:

> *When I did the certificate I found out I really did have a brain in this head of mine. It did so much for me on an emotional, on every level actually. I'll never forget standing on the field when we were handed out our first essay and mine had merits and I just cried. Everyone was like 'what's wrong Rose, have you failed?' And I was like 'No I'm smart!!' But it was just having that validation and it's helping me so so much in what I'm doing now. I am not so stressed in what I'm doing 'cause I've done assignments before, I've done essays before, I've done verbal presentations before, I've done HSF before. Even that, golly if I had to do HSF now without doing what I had done, without that confidence building. It's not necessarily what I know, as in the facts and figures, it's the fact that I know I can actually learn it. It's reinforcing the belief in myself, that I can do it and it's achievable. Yeah, it's taken a lot of fear away.*

Julie also discussed how the content from bridging papers was influential in altering her beliefs: *"I've got really good friends who are Māori but I've always considered us equal because I've always had the same upbringing and surroundings that they had, but that paper made me realise that that wasn't true"*. When asked how this occurred she responded:

> *It was probably a build-up over the semester. I didn't realise the kind of effect that colonization would have. Maybe because I'm the dominant one?! But I'd never really thought about it before. I'd gone all those years in my life never knowing that. ... I don't think the general population, without a university education knows it, or thinks about it.*

Challenges while students in the bridging programme

Julie and Ann, both mature students, spoke of the challenge of being in a learning environment with younger students. For example Julie declared:

> *Sometimes, it was hard being with the younger students because they weren't focused. I felt like I was more focused. I also felt I was the one doing all the talking, which I tried not to, giving them an opportunity first. They are not forward in communication at all. I enjoyed the ones that did communicate because it gave me a different perspective and often I would think, Oh I didn't think of that! So I liked the mixed classes. At first I felt out of place but then I got over it. Everyone is here for the same reason. Focusing on my goal helped me get over that.*

The Ongoing Influence of the Bridging Programme within the University

Transferable skills

The participants acknowledged that the skills learned in the bridging programme were aligned with those needed in undergraduate study. They also acknowledged that academic processes were demystified in the programme and that understanding was transferred into their undergraduate study. The students identified the skills (outlined in Table 5.1 earlier in this chapter) as being relevant and useful in their ongoing study. Lisa noted the content and the skills learned were useful, particularly in the first semester of the undergraduate degree programme, for example:

> *… all the time, but probably mostly the first six months. When we first go into the degree they expect you to know everything, from referencing, to terminology, to everything and there is no contact with our lecturer. … I noticed a difference from the people who just came right in.*

Rebekah made the link between skills learned in the supportive bridging environment and how useful they were in a less supportive environment, stating:

> *Now the process it's exactly the same. … In the degree they don't tell you exactly what to do. They expect you to know what to do, because they write everything on the booklet, so they don't want to show you how to do. … The certificate helped me to know how to read booklet. When I studied the certificate I always asked the teacher because I have no idea and the lecturers understand what I mean and would tell me how to look at it and show me what to focus on for the assignment.*

Rose indicated that the bridging papers taught her how to read the question and plan her work. She believed these skills are a foundation to build on:

> *I'm over my first year in a degree now. I haven't got the terror in my eyes because I can read the paper descriptor and I know that I've got that in*

there. It's like I can read the questions better so it's also an understanding of the whole academic process, which I have more of an understanding of then some of the people in my class. It takes a lot of the fear out of it, you know. I know it's harder and I know they are asking more of you, but the process is still the same, like the research and the writing, it's still the same, except it's just the content has changed. I've got a verbal next week and I'm not worried about that at all. Now I think, they wanted this in the certificate and what they want in the degree is, I just add more, go more in depth.

Endorsing the earlier comments of Rose, Ann claimed the range of learning skills is still relevant almost three years later:

> *As I said it was a pathway for me. It was really helpful. Everything the same just going deeper and deeper. And I remember the HP* [Health Promotion, a bridging paper] *lecturer, she said to make a mind map for the essay. I didn't know really what is mind map. But she helped me make it. That is still helping now. Every essay our lecturers say, 'make a mind map', so that mind map is helping me a lot. That was a basic stone for studying the degree course. Referencing is the same ... Now, comments on the page don't say why, like 'that this is not related to the sentence', they just write 'APA error'. ... The certificate, was very very helpful for me, it helped me a lot for my degree, especially about essay writing. It was really hard work for me for higher study, the essays and assignments, even exams.* [The HSF lecturer] *taught us how to behave in the exam hall, all those things: bringing the ID cards and being early. All those things were good learning for me now.*

Julie noted that gaining understanding of her learning style during the bridging programme was helpful: *"The thing I got out of the certificate for my confidence is knowing how I learn. I didn't know that before – that's sequential you know! I've been able to apply that for each semester as I've gone on".* She also claimed that the strategies learned in the bridging programme helped her manage the stress of further assessments, for example:

> *Before the certificate I didn't really know how to study. The first exam was a huge hurdle for me, because I had failed exams at school and I was so nervous! So when I went into the common semester* [the first semester of the BHSc] *I wasn't as nervous in the exam, I was prepared. That changed my whole outlook on how to do exams, 'cause I had never known before. It really helped me in that area. I used to go into exams and would have a complete blank. I didn't experience that in the exam. I felt well prepared, I still use the same processes preparing for exams now. I probably wouldn't have passed the first semester in the degree without it! It gave me the confidence to do everything like essays and verbal presentations and to do it well.*

Several participants commented on the increased workload in their degree programme. Time management skills learned in the bridging programme were helpful, for example

Lisa noted: *"I was confident to study for exams, knew how to plan an essay and time management, even though there were more than the certificate"*. Julie also stated:

> *I managed to cope with the workload quite well. It wasn't too hard. At first I was like AAGH, what am I doing here? But as I've said, I feel like that every semester. I think everyone does because you get the whole stuff laid out before you and you know what you have to achieve. I just adopted the attitude of just plod along – do a bit of everything. Focus on what's due first, try to have it finished before it's due so you can go over it. I don't know whether that's part of the way I am or that I got it from the certificate course. I am not sure. It could be from the certificate because everything was spaced out nicely, where as now days it's not. You just get it bang bang bang, middle and end. But you have to put the work in first to then be tested on it. I understand that, but I don't like living it!*

Rebekah also noted the communication skills and confidence to seek help from her peers developed during the bridging programme was important:

> *I'd have no idea what I should to do and I'd have not any support. ... The certificate helped me be confident to ask for help. If I didn't learn the certificate I will only ask same as my background* [EAL]*, maybe they given me different support but now I ask all my friends.*

Kiri mirrored the previous comments and also asserted that she was advantaged by having completed the bridging programme (one year):

> *Some of my friends who came straight from school really struggled to write essays. But I had already done it. Having had a year of writing essays and assignments really really helped me to be able to do it well. ... It definitely helped me with my academic skills and getting a bit of confidence in doing presentations. I think it is so great that I did it and it really helped in the degree, I have not failed yet! I work hard to get Bs and As. I don't want to graduate with just 50 per cent.*

Content links to degree papers

Most participants identified a clear link from the content of bridging papers to those in their degree programme, particularly in the common semester, the four core papers completed in the first six months of the BHSc. Participants varied in the ways they described the similarities and differences, but all indicated the alignment was useful. Rebekah said, *"The certificate papers were really relevant to the degree course. They look into different things but the information was the same but they ask you different ways to present the information"*. Susan's comments resonate with this idea: *"SH* [Society and Health, a bridging paper] *was good for base knowledge of what you go onto. ... We were definitely well prepared. At first it seemed like quite an overlap, but at least you know you're going to pass - if you study you will!"*

Lisa compared the depth and breadth of the content suggesting:

> *The certificate is more in depth that the first core papers. Like we did 'Lifespan'* [an undergraduate paper] *we had already covered more of the theorists and got into it better than what we did in that paper and like the same with HSF* [Human Structure and Function, a BHSc paper]. *You learn more in the certificate that what you do in the degree which sounds backward.*

Julie also asserted that she was advantaged by having completed the certificate:

> *I'd never even looked at the Treaty of Waitangi before because we didn't do it when I was at school. So that was a huge learning curve actually. It changed the way I looked at a lot of things. It helped me with the next paper a lot, I don't know if I would have passed without it. A couple of the girls that I'm with now didn't do the certificate. They just started in the July and they struggled, especially with HSF. ... The certificate took the pressure off, so much to learn. It gave me an introduction into how some of those* [human body] *systems worked. The way I had learned how to learn those in the Intro HSF* [bridging paper] *class, made it easier to apply to some of the systems that I didn't know, which helped a lot.*

Ann, an English as an Additional Language (EAL) student claimed that in the first three months of the bridging programme the information went over her head due to the accent. However, she felt well prepared for the degree after completing a year in the programme, she declared:

> *CHS* [the bridging certificate]*, if I hadn't gone through that I would be totally blind in the degree first year. ... I was so familiar with things because what I had been studying. Everything was repeated in the degree first year, so I felt so easy and I got all A's. I was very happy. ... My study still it is helping me. It is very very honestly that the certificate helped, still helping me a lot.*

Confidence to continue studying

Despite the amount of time in the bridging programme (three participants completed four papers in one semester and four completed eight papers over two semesters) they all stated the bridging programme was a major influence in their continuation of undergraduate study. Success in the tertiary environment at Level 4, gaining understanding of the learning processes and having a foundational understanding of the concepts and content culminated in resilience and according to the participants was partly responsible for their retention.

Susan thought there was a significant gap between 7th Form (Year 13) and the first year of an undergraduate degree but this was bridged well by the certificate, declaring: *"The*

base knowledge was really helpful going into the degree, even though you knew that you needed to work that bit harder". And*:*

> *If I would have just gone in to the degree I would have failed in the first semester. I have wanted to pull out every semester, but apparently once you get past the third semester it's all good. ... The information that you needed in the degree was so much higher than 7th Form that you just sink really.*

Lisa's previous schooling experiences were negative and as already discussed (see the section titled 'Increased confidence and altered beliefs') the bridging programme caused a significant shift in the beliefs about her academic ability. The support and explicit nature of the bridging programme were valuable to her. When asked of the role the programme played in her ongoing study she stressed:

> *It is definitely valuable. I would not have stayed if I hadn't done the certificate. ... In the degree they presume we know everything and we can't get appointments to see them. Not in that first six months 'cause they are not on campus. Or if you do, you get 15 minutes and that's it. So they don't help you at all. That's what I found. It was not that user friendly, I'm not trashing the degree. And also, those first four papers, they are probably so big, that's part of the problem. Yeah, I definitely would have dropped out! ... I think that the six months* [bridging certificate] *was enough to make me think, to give me the confidence to go on. Yeah. Because if it had been in the degree where they give us no support, I would have thought, this is no different and quit.*

Rose spoke about the ongoing change in her confidence that began with her success as a bridging student. She claimed:

> *Before this certificate my self-esteem wasn't that high. I guess I put in as much as I should, but I always kept something back. But this time because I've got more confidence, I'm not holding back as much. Sometimes I get the willies because 'hello' I am doing a degree! It is scary stuff but I'm not as afraid of failing as I was because I know there are people around me to help me out and not necessarily to hold my hand, but to guide me.*

Rebekah talked about the learning processes being the same and as an EAL student, she noted this was important both academically and emotionally: "*Emotionally it helped me. If I never studied the certificate for example and I just jumped in right now I would quit, 'cause I would be lost. I can't deal with it, the stress*"

Ann, also an EAL student, noted that although costly having to pay an additional years international student fees it was significant in her ongoing participation, claiming:

> *It was a very very good preparation. Though it was $17,000 I learned something, very helpful. If I had not done it I would struggle a lot because I did not have the basics. Maybe it would have taken one year to get the*

basics in the degree or I might leave. Of course I knew medical terms but it is very different here. And I do not know the proper English accent and I would suffer a lot. And also I have no idea, in [country] *we have no need for so many essays and that. ... It is helping me.*

Julie reflected on the ongoing changes in her self-concept and confidence and told me of an incident that occurred that reawakening her awareness. She commented:

At the end of last year, eighteen months after resigning, I went back to see my old work colleagues. Because sometimes, when things get on top of me I think what am I doing this for, why do I need this grief? But when I was there I was so glad that I wasn't there anymore. I've obviously moved on from that now and nothing had changed there. ... The process of studying is changing me. I never thought I was a scholar. I was a plodder at school who flunked exams. I never thought I would amount to anything much at all. When I first started the certificate, it was like, I wonder if this dream was too big. That is where the certificate helped me realise because I succeeded there, I knew I could succeed. Without that success, I wouldn't be where I am today. ... I don't know if I would have been ok without the certificate. I think it would have been really hard. For me it was the right thing to do. ... The certificate gives us the confidence to know that we can achieve.

Continuation of peer support

Several participants stated that the friendships made with other bridging students continued both formally and informally and they were a continuing support in their degree programmes, regardless of their undergraduate programme of study. The connections made were enduring. Susan noted "*There are two certificate students that I have stayed friends with throughout. It is good having the support from there and that we can chat together about what we have experienced*". Rebekah claimed:

We all know each other more than other students, we are really close. I got two in my class. Every time they see me they say hi, ask how your feeling. I feel respect, warm and so happy by simple thing they ask me. ... That helps me when it gets hard to carry on absolutely. 'Cause when I feel sad or something I'd rather choose to talk to them because they know me well.

Rose echoed the comments of Susan and Rebekah saying:

I am particularly close to my small group from the certificate. I still see them and we talk. It's neat watching them going on with what they are doing. It is good for the social thing and being able to bounce ideas off.

Confidence to mentor and assist others

The participants' believed the confidence and knowledge gained in the bridging programme benefited them. They were willing to share the skills and knowledge with

their undergraduate peers. Lisa compared herself to other adult students who came to study with significant work experience but limited academic skill, for example: *"They come in and I see them still struggling with it and I am not. It's almost like a complete different world that is separate from everything else. I can help them"*. Ann learned about study groups and their usefulness in the bridging programme: *"We did have study groups and we all passed in that time, especially HSF2* [a bridging paper]*"*. She spoke about setting up a study group with her undergraduate peers that focussed on all their papers and how she at times she directed the process:

> *It was helpful in there was sometimes I don't know the proper answer. But a person who was sitting with me did in my study group. For example HSF, one of those will be knowing the correct answer. It helps us more the study group. We all prepare a different subject. So everyone will bring one and we would study that, so if I don't know I can learn ...*

Julie also spoke of how she mentored another student claiming:

> *I found that I was helping someone that hadn't done the certificate, particularly with how to set out an essay and all those details. The stuff that certificate lecturers take time to teach. There isn't time when we get to the degree, so if we don't know it we struggle. The outline, the way in which to research, to narrow things down, I still do those things now. I don't know where I would have learned it otherwise.*

Experiences with degree lecturers

The relationships of participants with their BHSc lecturers appears to be very different to those with bridging lecturers. Five participants spoke about the significant change in support they experienced when commencing undergraduate study. As already highlighted by participants comments, some experienced limited support. This is possibly due to the large numbers of students in the first semester of their health degrees, taking the core papers common to all BHSc majors. While the participants are enrolled in different programmes, there are similarities in their stories and experiences with lecturers, some positive, but unfortunately most less so. While this is possibly outside of the scope of this research, the participants' remarks of their experiences with degree lecturers have been included as during the interview they felt they were relevant. Lisa noted: *"Some teachers are very, very, good, explaining as many times as we wanted. ... Some teachers are not very nice and they didn't answer our questions at all"*. Ann also noted the change stating:

> *There was some time that first semester in the degree for help, but from the second semester we never hear that. We have to stand on our own legs and*

we have to study by ourselves. Most lecturers keep us running, they won't say anything and we have to do hard work at home. They won't say anything like how to do it, because it is not their problem.

Rebekah echoed Ann's comments about the change in support, claiming:

We only got support the first semester, first year of the degree. ... the teachers' guiding learning. From the second semester we have to do it by ourselves but we don't know that. It's been very helpful for those who went through the CHS, because we know how.

Susan commented on an inconsistency, noting:

It is so different, there are more students. Some of the teachers on the degree course don't remember our names whereas you guys would always remember us and call out our names. They might say 'you, up there, in the pink shirt'. It's demoralizing. You know, they are teaching us about the importance of names in tutorials and they don't even remember ours. That's one important thing.

Julie reflected on the influence the lack of support had on her sense of coping, stating:

I feel overwhelmed at the beginning of every semester, thinking I'll never be able to do this. I'm still feeling a bit like that even now as this semester has taken a lot longer than the other two but I feel like I'm coming through that now. Once you get over that initial hurdle it's better. I think it's taken me a lot longer. I think it's that lack of support, it feels like there's nothing – I mean the tutors are there, but they answer your question with a question, but it makes you think more. In the certificate the support was great.

Rose also spoke of how her experiences with lecturers in the bridging programme influenced her relationships with her current lecturers positively, giving her confidence to approach the lecturers and ask questions. Other participants in this programme were also more positive about their experiences with lecturers, possibly due to the smaller numbers of students in this BHSc programme. For example Rose noted:

Because of the certificate, I find I am able to talk to my lecturers really easily now and if I have a question, I ask it and they are supportive. If I don't get an answer from them that I want, then I try and look for it myself. 'Cause that's what you need to do to be successful, there is self-directed learning not spoon feeding.

Ongoing acknowledgement (and support) of past lecturers

Two participants spoke about seeing their former bridging lecturers as they walked around the campus and the feelings and responses that elicited. Rose noted: *"It is lovely when I walk past and I see you people and you wave at me, 'cause you always make me*

feel like I am meant to be here and welcome to be here". Kiri echoed Rose's comments and also noted her desire to have the bridging lecturers at her graduation, commenting:

> *It's great to see you all on campus, it gives me a boost, I know I can do it ... Actually, I want all of you's to be at my graduation. I want you all to be there and I will come over and we can celebrate!*

Following the interview Lisa emailed me a paragraph which began: *"I was thinking more about the questions about the importance of certificate".* She wrote about the importance of both her bridging experiences and the ongoing relationships with a former bridging lecturer during a period of disillusionment in her degree programme that resulted in continued degree study albeit in another major. She noted:

> *If I hadn't done the certificate papers then I would never have heard of* [Major] *and would have dropped out of AUT completely. The majority of people doing the degree who I have spoken to heard about it by doing the certificate. Most people, when you tell them you are doing the degree, if they haven't done the certificate papers they have no idea what it is or that it is even a degree. So in a way the certificate is important for that degree. If that makes sense.* [A lecturer] *was quite influential with me considering changing to* [Major]. *I was unhappy in* [Major] *and I came back to him and we talked and then I swapped.*

Rather than 'quit', Lisa sought support and advise. Due to the knowledge and confidence she gained through the bridging programme and continued to develop, she changed her major. In late 2007 she completed her degree and found employment.

Influences on Areas Outside Academia

All seven participants clearly indicated the influence of the bridging programme went further than their academic studies, influencing their lives. These were both positive and negative, and were personal, social/relational and/or financial in nature. The 'life loads' of each participant varied considerably and the range of influence reflects this.

Holistic change within the participant

Several participants spoke about a growing awareness and understanding of the influences on their own development processes that was facilitated by different papers in the bridging programme. Exposure to new ideas and concepts allows for the critical questioning of long held beliefs and in some cases, these beliefs to be altered with significant effects personally and socially. Lisa said:

> *Coming to uni, doing the certificate, it made me more interested and I think about more stuff, meeting broader people, so socially it affects you. ... It*

made me think a lot more about actions and how I influence people. ... I started to realise why I do stuff. There's a gradual awareness why I do things, more knowledge. ... Uni, the certificate, influences my life, it influenced my personal life but my personal life doesn't really influence uni.

Julie indicated that the opportunity to mix with younger people changed her worldview, claiming: *"The certificate made me feel younger! Mixing with young people all the time, I get a different outlook on life compared to what I would have had".*

Rose indicated that her growing knowledge influenced the way she viewed her family:

I mean it's not just the person studying who it affects, it's everybody around them. It affects all their relationships. I understand now the whole 'knowledge is power, education is freedom' thing. I never really got that and now I'm living it, I do! It's freedom from- not to say that manual work is not a good thing, but when you are capable of so much more and you know it, being able to do so much more almost frees the soul. Being able to live to your true capacity. It's broadened my horizons so much. And I even find I have a bit more interest in more things. When I look at my kids, because of Human Development I know they are at the right stage for their age. And it's things like that with my son facing surgery, I get out my human development textbook, I look at things and what he's going through for someone in his age group and what he can understand and concepts and that. And even that's helpful, even for my kids.

Julie identified how the teaching of concepts and ideas caused her to *"see things from another perspective. We are kind of made to. We're reading and researching. I've never done that before".* She also came to see how her socialisation was the lens through which she viewed the world, stating:

Because my family were poor and we lived in a predominantly Māori neighbourhood, most of my friends were Māori, I always considered them to be equal to me. The certificate made me realise that even though I may have been in the same level with them, my mother's attitude to education and her attention to what she wanted, how hard she worked, maybe changed things and made me different to them.

Some bridging papers offered opportunities to link theory with practice through observation in the community. Several participants asserted that the community experience had been a significant ongoing influence on their beliefs about themselves and others. Kiri attended a facility for disabled children and noted: *"It's definitely opened my heart up more to be more empathetic towards those kind of people and not be so judgemental!"* Rose was also influenced by the opportunity saying:

Going out on the community experience for AHD [a bridging paper] really started the foundation of thinking that you're moving from being just an ordinary person, to being a health professional, which is such a different

state of being when you're out in the community. It just gave me such a confidence in my abilities, that what I was saying made sense.

Changing relationships

Several participants experienced change in their interactions with others in their social circle as a result of the bridging programme. The broadening of experience and new learning opportunities changed some of the participant's views and actions. This influenced and changed their behaviour, which in turn influenced their family, significant others, friends. Julie commented that as she gained skills she was passing them on to her family, for example: *"I got the skills to shape my learning and I find I'm using those skills on my son who is now at uni. But I think he did get a little bit of it in the second round in the 7th form but not at uni".* She also realised that:

> *The certificate gave me a whole new respect for students. It also gave me an opportunity to be a good example to my family, especially my son who never did homework. It's really funny because my family call me a nerd now, but I tell them it's not that I'm a nerd but that I have a goal that I want to reach.*

Kiri spoke of a change in the way she parented her toddler, noting:

> *Society and Health* [a bridging paper] *really opened my eyes up to socialisation and stuff. I didn't even know what socialisation was and then I studied it. We did more in Psychology* [a bridging paper] *and I think it's really important and I try to get my daughter socialising in different groups and cultures so she gets exposed.*

Rose recognised the immediate and long term implications of her choices and behaviour on her family. She spoke of the modelling process and the profound influence it had on her family, particularly her son, declaring:

> *My oldest, when I started my foundation papers, he wasn't interested in school. He couldn't really see any future in it. And over that year, seeing me working hard, getting things done, completing things, studying in the evening, rubbed off on him in such a big way. His last year at primary school he just improved so much academically, socially, everything. Even his self-esteem went up! And now he's talking about going to university and he's only 11. He knows it's an achievable thing. He knows he can do it.*

> *What it's going to do for my family as a whole. Oh my gosh! My kids aren't going to know me as the silly person who sat on the dole most of my time. They are going to see me as this person who is out and educated and achieving and they are going to think that's normal. So we're not only changing me, we're changing my children, we're changing the whole path of the whole family line, basically. I mean that's amazing! I will be the first woman in my family to be educated which is so different from what my mother said. My brother has a degree and we are the first people in our*

family to be educated and it's causing a shift in our family. it's quite neat being a bit of a pioneer. They will go 'old grandmother Rose, she was a [major], she's something, she got her degree'. And my daughter will think it is normal, which is fantastic because I always vowed and declared if I ever had a girl I would let her do whatever she wanted to do. And I would never ever say to her, 'you can't do that because you are a girl.' So I feel inspired by them and I'm doing it for them and I'm doing it for myself, because I want them to know that they can do it for themselves. The best way to show someone how to do it, to do something, is to do it yourself and I've always been a hands-on learner.

Participants also identified changing roles in their families because of study. While this is not directly relevant to the research question, or attributable to the bridging programme, to honor the participants' narratives I have included it. Julie commented about the increasing role her husband and family took:

My husband gives financial support. He has also taken on some of the cooking duties. I still do a lot of the laundry. Funny how we revise these roles isn't it? The kids have to do a lot more around the house. Mine are a lot older – I waited until my youngest was 14 before I started so she's independent to a degree, so once she's got a license it'll be even better.

Rose was also supported by her husband, he took on the main responsibilities of the household and their four children. She acknowledged:

I have my fantastic partner, who I just adore. Oh my word he is so supportive, he looks after our children. I mean I have four children! He looks after them all day and he gives me room to do this and some days. Just the heart of the man to let me do this. Amazing!

Rose also remarked how her relationships with friends were also positively affected:

Even talking with friends, since the certificate, I have a lot more confidence and I'll say something and instead of thinking 'gosh that was really stupid and I should have never mentioned that. Dumb arse. I can see my friends actually listening to me now and they are interested in what I've got to say.

Relational challenges

Several participants identified the time demands of study as a cause of strain in relationships. They indicated that certain times, such as when exams and assessments were due, were the most challenging. Lisa commented on how friends and family, while being generally supportive, were not fully understanding, saying:

Around exam time, probably no one wants to know you. That's the weirdest thing, 'cause even now, no one gets it. ... I talk to my husband about what I'm learning which sometimes he likes and sometimes they drive him insane. It definitely influences him and its better now 'cause I have a lot broader

stuff that we can talk about. He reckons that I've changed, probably for the better.

Changes in priorities due to the demands of study were also identified as a challenge by several participants. For example, Kiri said about her daughter:

> *I used to feel guilty when I first started studying because she was in day care so much and I had been at home with her, her first two years and then she was in day care for 38 hours a week. So I was feeling really, really, guilty about not having that one on one time with her, but I just have made days that I don't do study and it's just about her. But she knows I have to study and I'm doing it for both of us and she is really understanding about it. I think I am so lucky that I had her because she's motivation. I'm kind of doing it for myself, but I'm more doing it for her, for a better life. I don't what to be a poor student anymore.*

Ann's decision to gain a New Zealand qualification has resulted in a significant move away from her husband and family overseas. Her 'faith' has been a significant factor in providing the strength to endure and overcome this challenge, she noted:

> *It is hard for me to be away from family. Now, I made up my mind. It was hard, because every day I used to think about my family. I am missing my husband and child but I know my purpose, why I am here. So at that time when the situation makes me depressed, I hold on my God's hand. That is the way I am surviving. I pray, sing songs and read my Bible. Then I would be strong and sit down and study. Always my family is a big support for me. While I'm here my mother, brother and sisters and their husbands, they are Christians and they know and phone and support me. They pray for me.*

Enduring friendships with former bridging peers

Friendships made in the bridging programme continued to be significant for participants regardless of the whether the person was in ongoing study or not. Rebekah noted that:
"For me, I think the certificate was a huge benefit for academic but another benefit is I make friends – Kiwi friends". Kiri spoke about the enduring friendships made while in the bridging programme indicating they were academic and social, with possible implications when qualified as health professionals in different fields. She stated:

> *The people that I met on the certificate, even though it was two and a half years ago, I made some awesome friends and even though we are studying different degrees, we all still meet up and we drink and go out. We catch up, it's really cool that even though we are not studying the same papers and we really don't see each other around uni anymore but like, we still keep in contact. It's really cool that I made some lifelong friends. I don't really see them on campus because of our timetables and things. It's good to see that we all still talk about graduating together, 'cause that is what we talked about in the certificate, that we would all graduate together, except the physio's graduate the year after. But they will be there for us and we will be*

there for them. Our certificate group was really tight, we are still pretty tight. One of the girls is studying at AU [another university] *now and she comes over and has lunch with us. It's cool. ... I'm gonna have friends with all different profession, oral health, my physio mates, heaps of nurses. Yeah, I look at my circle of friends and it's just getting bigger. It's really good meeting people studying different papers, 'cause it networking, like we all graduate we can say I know this really good OT, or physio!* [Laughing.] *We definitely will be referring people on to each other.*

Financial implications

Several participants identified the financial implications of having to complete papers in the bridging programme prior to entering their chosen degree. The participants studied in the bridging programme for one or two semesters increasing the overall cost of fees and compounding the loss of income. For example, Lisa noted: *"Financially you're down to one income. So financially it's much harder"*. As an international student Ann told me that a year's fee to complete the bridging certificate was personally difficult and the money caused a *"strain on my marriage but my husband was very supportive, as I learned some very helpful things and if I had not done it I would struggle a lot"*. As previously noted, Ann believed the money was a good investment.

Promotion of the bridging programme

Several of the participants were so influenced by the bridging programme they became keen promoters, acknowledging their influence in referring others to consider and enroll in the programme. For example, Kiri said "*I so recommend it to people who can't decide what they want to do or what ever*". Susan was enthusiastic as she claimed:

> *I tell everyone! I had a friend ask and I said well if you're not going to get in, do the bridging course. I recommended it. I'd just tell them what we did and how it was. One of my friends just went and did it and they thought it was awesome as well.*

Julie was also enthusiastic as she asserted:

> *I am really glad the certificate is here. I just love it and I would tell anyone to do it. If you have anyone who doubts then send them to me! ... I recommended the certificate course to a friend of mine. She did exactly what I did, but a year later. She's now in the degree. She asked me about it. She didn't realise there was one. Until someone makes enquiries, they don't even know that they can do it. My son for example, I was able to give him the choice of doing the certificate or the diploma or something, because I knew about it. Had I not done it, I wouldn't have known about it. He then chose what to do, going back to high school. He achieved better because he chose. Now he's going to University.*

Glimpses of a different future and its impact on communities

Several participants also spoke about their hopes and dreams for the future. The opportunity to live those dreams is becoming a reality because of their academic success in further study, which as previously stated by participants is partially attributed to the bridging programme. Ann came to New Zealand with a clear purpose. She believed a New Zealand qualification would assist her in providing holistic care for people in her home nation. Her dream was becoming a reality as she progressed through her undergraduate programme. She reflected: *"The certificate very honestly helped and still helping me a lot. I will be able to go home and have better clinics with good care when I am finished my degree".* Kiri also spoke at length about her intended future and desire to influence the Māori community:

> *The certificate has made my dreams of having an accessible and affordable service for people who are sick but can't afford it to go to real. ... With my degree I can help people. A lot of people in my family have type one diabetes and a lot on the Marae have diabetes type one and two and it's really sad 'cause it so easily preventable – type 2. I just really want to change that, help with their health and lifestyle. I am taking the Māori pathway ... through that I'm hoping to get insight into reaching people's wairua, making them aware. I am hoping to improve the Māori health statistics, make a difference.*

The Research Journal

The research journal was a useful place to reflect critically on my perceptions of where I was in relation to the participants' and what I considered the informants' perceptions of this relationship to be. The purpose was to identify any bias (Cohen, et al., 2007; Petrie, 2005) and a range was perceived and acknowledged in the journal. However, I do believe the participants were forthcoming and honest in their comments. Research journal entries made following each of the interviews included some of the nuances of body language and expressions, along with my thoughts and reflections. Entries show that at each interview I related in slightly different ways to the informant and they to me. There was a varying level of 'research distances' related to a number of factors, including prior relationships and a deepening understanding of and empathy with the participants and their experiences. As I became more comfortable with the process and as participatory consciousness (Petrie, 2005) grew, the dialogue was more conversational as I felt more relaxed. Some participants were very open about their lives and their perception of the bridging programmes influence, while others were more guarded. I wondered if this was a cultural issue or influence. The journal was also useful

as emerging ideas and themes were articulated, refined and reshaped, as the data collection and analysis continued.

Readers may have noticed I have included examples of my own reflections from my personal research journal as 'data' in this thesis. These provide introductory quotations to each chapter.

Concluding Comments

The contribution of each participant has been included verbatim in this chapter and emergent themes identified across the participant group. It has shown that although the influence of the bridging programme on the seven former students were multi-faceted and contextualised by the uniqueness of each participant's lives, there are some similarities. The semi-structured questions elicited a resounding response that the bridging programme had a positive influence that has continued, in academic, personal and social areas of their lives.

The influence of the certificate began at enrollment and continued. The participants cognitive, metacognitive and affective domains were influenced as new skills and knowledge was gained and/or enhanced during the bridging programme. The bridging programme appears to be an effective transition into tertiary study and the skills and knowledge learned appear to have been transferable. The participants attribute their ongoing success and persistence in tertiary study to the bridging programme. The increased confidence, self-efficacy and increasing range of skills and knowledge gained in the certificate influenced the way participants behaved and interacted with a range of individuals and groups including: within the institution; their undergraduate programme; with educators and peers; and with family, friends and others in society. Some participants also identified related challenges they experienced as a result of tertiary study. It would seem that the bridging programme was an important and significant phase for the participants resulting in considerable personal growth. As the participants were changed, their interactions with family and friends also changed and the skills and knowledge transferred and extended into the lives of former bridging students families. New possibilities were becoming evident as the personal transformation facilitated initially by the bridging programme continued.

In the following chapter (Chapter 6) the themes/findings are related to the literature and discussed.

Chapter 6: Discussion

> The rich lived data was all I hoped for and more. The unveiling of the students perspectives revealed transformation and change. Time has passed and yet the influence continues. A series of events set in motion by an initial choice and decision. Looking back to my hopes for the research, it seems the thesis and other presentations of this research may provide a 'voice' about their experiences, of study, growth and change in their journey. (Personal research journal entry, December 9, 2007)

Overview

The findings of this research aimed at identifying the influence of a bridging programme are overwhelmingly positive and far reaching. This chapter explored the meaning and implications of the emergent themes from the data beginning with discussion on the holistic nature of development. For these participants there was a clear need for a bridging programme and the influence began at enrollment. Entry to the bridging programme, while initially important to participants, was not as influential as the learning skills gained and applied during the bridging programme and beyond. Academic contextual factors such as: the institution, educators, peers, assessments, and familiarity with the university environment were also important. Participants experienced academic, personal and affective influences of the bridging programme. The influences of the bridging programme were far greater than personal or academic, but included social influences on academic peers, social peers, family and possible future implications for their communities. This chapter discussed the influences that were identified in the findings and related them to relevant literature.

Students are First and Foremost Whole People

Individuals operate holistically, using a complex myriad of resources related to selfhood as they develop as integrative physical, emotional, relational, psychological, social, cultural, political and spiritual beings (Hamil, 2002). The measure of a persons development is not simply in the memorisation of information, the completion of a qualification, or even resolving a problem, but rather in moving along a transformative trajectory towards a more fully realised completeness or wholeness. Individual's experiences of the bridging programme and their perceptions of those experiences resulted in them coming to know more than was empirically verifiable. The veracity of the participant's comments has not been established other than through participant verification of the transcripts and data triangulation (Charles & Mertler, 2002). The purpose of this research was to explore the 'lived experience' of former bridging

students to gain a wide-ranging contextual picture of the influences of a bridging programme.

While the students attributed the range of influences identified in Chapter 5 to the bridging programme, it is acknowledged that development is lifelong, involves gains and losses and is influenced by the range of contexts within which each individual interacts (Papalia, et al., 2004). In an age of mass produced goods and a 'one size fits all' mentality, the unique nature of each individual and learning must be acknowledged. Both nature (an individual's innate qualities) and nurture (their experiences) are influential in determining or causing individual differences in physical and behavioural traits, and consequently learning (Papalia, et al., 2004). Bridging programmes are able to provide a context within which a student can further develop academically and this appears to have influenced other areas of the participants lives.

Bronfenbrenner's (1981, 2005) bioecological model highlights the person context relationship, in that individuals develop in relation to their family, home, school, community and the broader society over their life course (see Figure 2.1). The interactions between the developing persona and five surrounding interlocking contextual systems of influences, which either support or stifle growth, provide key insight into aspects of learning. Social structures and cultures vary significantly and in Aotearoa New Zealand. European, Māori, Pasifika peoples, and immigrants each have diverse worldviews, associated roles, norms and rules that can powerfully shape development (King, 2003). Educators must acknowledge those differences and practice in culturally appropriate ways (Anae, et al., 2002; Dirks, et al., 2006).

Growth in an individual's knowledge, skills, competencies and attributes facilitates personal, social and economic wellbeing (Stroombergen, Rose & Nana, 2002). According to Bronfenbrenner (1981), the individual is an inseparable part interacting with the environment. It is the interaction of innate and experiential factors in multiple contexts that influences individuals. Learning experiences and life events cause inevitable change within the individual, in relationships and within systems (Bronfenbrenner, 1981, 2005; Dahlgren & Whitehead, 2007). I have discussed aspects of the diverse contextual influences of a bridging programme from the students perspective separately for simplicities sake. However, I wish to emphasise that it is essential that the reader understands (as I do) there is inherent tension and complexity in the interrelationships of these influences.

At the Door with Aspiration

Students enter the bridging programme with a desire to obtain a BHSc qualification that would enable them to work as a health professional. Yet they lack the necessary educational qualifications, experience or confidence required for this type of study. The participants were all non-traditional or underprepared students, all were women, several were from minority ethnic groups, were mature and/or from lower socio-economic backgrounds (Hayes, et al., 1997; Leach & Zepke, 2005). They are descriptive of the many individuals who enter bridging education.

All the participants expressed that gaining access to tertiary study was challenging. Julie, Lisa and Rose were technically eligible for tertiary study (being over twenty years) yet their educational background was challenged due in part to the lapse since their previous education experience, or lack of science knowledge. Lisa and Rose also had negative schooling experiences and *"dropped out"* with limited secondary qualifications. They had attempted tertiary study elsewhere and again, had dropped out. Susan did not meet University Entrance criteria for a BHSc. Rebekah (an immigrant) and Ann (an international student) were EAL students who rather than complete IELTS examinations (to obtain the required 6.5 IELTS for direct entry to a BHSc) enrolled in the bridging programme. Kiri, on her sisters advice, enrolled directly into the bridging programme. Each participant had a differing range of educational and life experiences. Confidence in their educational ability, changes in family circumstances (such as a youngest child entering college) and employment (such as the closing of a family business) were factors confronting the students as they considered their options. Embarking on tertiary study required a substantial shift in focus from family and employment for five participants, while two participants transitioned from one form of education to another.

Compulsory education in New Zealand is seen as a way to provide students with a range of literacy skills (Gilman, 1997). Susan, the only school leaver, had failed to achieve university entrance criteria, noting that after five years at secondary school, *"I had no idea how to write essays"*. Lisa and Rose also had negative educational experiences that are echoed by the significant numbers who leave secondary school ill equipped (Loader & Dalgety, 2008; Schmidt et al., 2005). While not conclusive, this indicates that the New Zealand education system is clearly not suited to adequately prepare *all* students with the skills necessary for tertiary study. The bridging programme offered participants an alternative preparation for entry to the BHSc.

The participants aspiration to attain a BHSc came from within, but their hope was built and encouraged by several influences, including friends, family and changing circumstances. Hope is an important factor which enables individuals to engage self-regulatory processes and to achieve or move towards their desired goals (Alexander & Onwuegbuzie, 2007; Snyder, 2002). A BHSc qualification can open employment opportunities as a health professional with associated mana and economic benefits. Each participant was pursuing their dream. EAL students Rebekah and Ann believed a New Zealand qualification was important and so they were willing to learn in English, aware this would be a challenge.

Gaining information and enrolling at the university was not a straight forward process for the participants. The 'Faculty Programme Information Advisor' was central to the participants inquiries and entry process to the university according to their narratives. Uncertainty about the course of study, lack of confidence, not meeting the requirements resulted in participants being advised or required to complete the bridging programme before commencing their chosen BHSc degree. The participants described a range of reactions to this requirement from being *"pissed off"* (Susan) and *"a bit annoyed"* (Rose), to *"fair enough"* (Julie).

The participants experiences of obtaining information and enrolling in a suitable programme supports the literature on the challenges prospective bridging students face (James, 2000). The usability of information TEI's provide is reported as not being as effective as that from peers and mentors (Anae, Anderson, Benseman & Coxon, 2002; McKegg, 2003). Raising foundation learning skills (Tertiary Education Commission, 2006) and creating alternative pathways for underprepared and non-traditional students into tertiary programmes requires institutions to review and adjust their expectations and methods in which prospective students gather information. The potential barriers under-prepared and non-traditional students face are significant (Leach & Zepke, 2005; Morris, 1975) and require institutions and bridging programmes to have clear policies and practices which minimise them (Benseman & Russ, 2001; Leach & Zepke, 2005).

Bridging programmes aim to assist students in a range of ways (Benseman & Russ, 2001; Trewartha, 2002). They can provide a thorough subject based academic grounding and opportunities for the development of academic study skills and personal management skills. This occurs within a supportive environment that encourages and promotes the students independence and confidence. All these aspects of the bridging programme were apparent in the participants narratives. Whilst bridging education is, in

part, an 'ambulance at the bottom of the cliff' approach, it effectively provides students (the participants) with an alternative pathway to tertiary study. The bridging programme was a doorway of hope for participants as it provided an opportunity to accomplish their academic aspirations. The bridging programme's influence began at enrollment and has continued, influencing a range of facets intrinsic to the participants lives.

Through the Door, On and Over the Bridge

Within the education system, effective teaching is the most powerful influence that contributes to student success (Ministry of Education, 2005). A large portion of the participants comments reflected the importance of their educators. The educator is responsible, in the first instance, for the quality of learning that will occur for students, even with the advances in technology which can alter the learning teaching environment. Palmer (1988) argues that "teachers possess the power to create conditions that can help students learn a great deal – or keep them from learning much at all" (p. 6) regardless of the type of formal education, whether a lecture, seminar, tutorial, field work, laboratory or electronic classroom. My experience of university teaching is that it is a rather private affair and educators have a significantly variable knowledge and understanding of the learning teaching process. The complexity of the living classroom requires educators to have a range knowledge and understanding and the ability to be responsive to the range of student needs.

Effective teaching comes in a myriad of forms, emanating from the identity and integrity of the teacher (Palmer, 1998). There is limited research into the educational beliefs university teachers bring to their teaching in higher education (Prosser, Martin, Trigwell, Ramsden & Lueckenhausen, 2005). Morgan (2003) found that many educators' were unable to articulate their philosophy of education, yet educators practice or teach out of who they are. She also noted that further development and implementation of a philosophical framework, which underpins educators practice was needed. When educators begin to understand the symbolic meanings their actions have for students and the way their backgrounds, personalities, cultural traditions and racial identities frame how they experience learning activities, then educators are better able to behave in ways that have the sought effects (Brookfield, 2006). The educator has a pivotal role in the learning process and this research supports the need for educators to understand their practice in light of their personal and educational philosophies.

Philosophy underlies the more visible pedagogy and curriculum of all educational programmes, whether it can be articulated or not (Morgan, 2003). As a new programme

in 2003, the design of each paper in the bridging programme was intentional (Harford, Morgan & Watt, 2003), based on a strong bridging philosophy and pedagogy, including emancipatory and transformative elements. It was designed to provide an effective introduction to the tertiary environment and to equip students with a 'bag of tools' (skills) that would assist them in tertiary study within the Health Faculty, creating a pathway for students into BHSc majors (Harford, Morgan & Watt, 2003; Watt, 2002).

As the programme has relatively open entry, the diversity in learning approaches and academic skills (cognitive and meta-cognitive) of students enrolling is vast. Participants all indicated a similar range of aspects of the bridging programme curriculum that had influenced them, that were relevant to their needs, liberating and caused important changes and transformation in thinking, emotions and actions. This is indicated by the participants comments, for example: *"The bridging certificate was about learning the processes"* (Rose), *"On the certificate we just get a better understanding of the whole system"* (Lisa) and *"... they liked to encourage us, ... the certificate lecturers were always willing to help us and wanted to talk with us"* (Susan). The participants enrolled in the bridging programme at different times (over three and a half years) and took a range of papers with a variety of bridging educators. This alludes to educators within the bridging programme having a coherent philosophy and pedagogy.

While the focus of the interviews was on the influence of the bridging programme, the participants indicated they experienced a shift in the philosophy and pedagogy of educators as undergraduate students. While the underlying philosophies were not as apparent in the narratives, they clearly indicated a range of pedagogy in different programmes, ranging from strong content focus with limited engagement between the students and educators, to a more student-centred approach to facilitate learning. This is indicated by statements such as *"...we don't get* [personal contact] *in the degree. ... They just dump everything on you, like in all the lectures and that's a really hard way to learn"* (Lisa) and *"They don't give many support, and I understand why. But it's really hard. ... in the degree they don't tell you exactly what to do. They expect you to know what to do because they write everything in the booklet"* (Rebekah). The extent to which teaching in the BHSc aims to prepare students for a health profession and the applied nature of their study is unknown but is assumed to be considerable. The participants learning experiences may be deemed part of the "rite of passage into a particular disciplinary culture" (Burwood, 1999, p. 447) however, the educators level of understanding of learning and teaching theory may also be a factor.

The extent to which the philosophy and pedagogy of bridging and undergraduate programmes differed as expressed by the participants was an unexpected finding of this research. The bridging experience was reported as being positive, although it did not start that way for several participants. The exposure to different educators, philosophies and pedagogy appears to have enabled the participants to be able to identify, assess and compare their experiences with educators and peers in a more coherent way. The range of influences which follow are, I believe, directly affected by the coherent bridging pedagogy and philosophy of educators within the bridging programme and further research is required to explore its characteristics.

Development of Cognitive, Metacognitive and Affective Domains

"The history of the learner exerts a potent influence on student achievement and attitudes" (Anderson, 2004, p. 177). The affective and metacognitive domains, influenced by the educational history and attitudes of the student are more influential than the cognitive domain, skills and knowledge, as they form the basis for cognitive development (Cantwell, 2003). Anderson (2004) asserts that in childhood and adolescence, prior learning and attitudes brought into the classroom are so influential that "few if any variables can compensate for it, let alone overcome it" (p. 177). The type of home life, future aspirations and attitudes towards school in general and the specific subject matter are highly influential (Anderson, 2004). The personal, academic, cultural and social factors adult students enter bridging education with can however, be influenced. Both Freire (1972, 1994) and Mezirow (1991, 2000) believed educators can help students focus on and examine underlying assumptions that inform beliefs, feelings and actions; assess the consequences of these assumptions; identify and explore alternatives; and engage in reflective dialogue.

While not all these factors are known about the participants, Lisa, Susan, Kiri, Julie and Rose had negative experiences in their educational past. Ann and Rebekah were learning in an English context, very different from their previous experiences in their native countries. Tertiary students have more autonomy than children, yet the experiences of childhood frame our experiences in adulthood. Transformation of core beliefs and attitudes is required for meaningful learning and change to occur. Intentional acts of learning in the bridging classroom can facilitate this change and as the findings show, this transformation affects a range of areas. Lisa claimed *"The certificate changed the way I thought about myself."* Julie's comment is indicative of all the participants noting it gave "*me confidence to believe in myself*".

The participants narratives support a range of literature showing that bridging programmes as effective in preparing students for further study. Students enter bridging education for numerous reasons. Unresolved problems, negative schooling experiences, lack of engagement with study, low self esteem and a lack of confidence are common traits of bridging students (Benseman & Russ, 2001; Coutts 2006). While elements of their prior history and many other factors putting them 'at risk' can be identified (Leach & Zepke, 2005; Loader & Dalgety, 2008), support beyond mere attendance at lectures and tutorials were identified as important (Anderson, 2007; Benseman, et al., 2006; McClenney & Greene, 2005). Individual support, pastoral care, the quality of educator's interactions and learning communities are acknowledged as vital to bridging students success and it is the quality of the interactions between educators and students that is considered a crucial factor (Anderson, 2007; Dewart, 2003; Harford, 2002; Piercy, 2001; Trewartha, 1999).

Academic support in the form of integrated study skills within a context, which are taught and learned early in a student's bridging programme, equips students with new learning patterns and the ability to amend or adapt their strategies as needed (Chalmers & Fuller, 1996; Hoffman, 2004; Schmidt et al., 2005). Mabbett, et al., (2005) suggested that non-traditional students in undergraduate programmes may require greater support from both educators and the institution to complete qualifications. This would suggest that academic assistance and support may be required throughout tertiary study by some students. This research indicates that cohesive bridging pedagogy and philosophy within a bridging programme transforms students learning experiences and enables them to gain and develop a range of cognitive and metacognitive skills required for successful tertiary study. The participants indicated a range of support strategies they applied in ongoing study including seeking help from educators and when that was unavailable they sought help from their (bridging) peers.

The participants brought a range of lifelong learning and educational experiences with them when they commenced the bridging programme. In understanding the needs of individual students, practice can be adapted resulting in learning experience being more meaningful. The participants narratives reveal that during the bridging programme they experienced more than the transmission of facts, but education that was and continues to be relevant to their needs. Aspects of empowerment, emancipation and transformation (refer to Freire, 1972, 1994; and Mezirow, 1991, 1996a) echo through the narratives showing meaningful change occurred in a variety of ways.

Freire's (1972, 1994) conscientisation in which individuals gradually perceive personal and social reality and the contradictions in it was evident as part of the participants development during the bridging programme. Participants were able to reflect and re-assess their experiences in a range of contexts. Julie, Rose and Kiri reflected on the change in their childhood beliefs. Julie's comment revealed the change in understanding and awareness of socialisation that occurred in the bridging programme. Having grown up with Māori friends she noted: *"I always considered us equal ... but that paper made me realise that that wasn't true"*. As concepts were introduced, discussed in a safe environment and reflected on, a gradual awareness came to Julie: *"Maybe because I'm the dominant one?!"* The participants were able to recognise different ways of teaching and assess its impact on their learning. A challenge for some participants related to their expectations of undergraduate study and its educators. The marked variation between different educators and programmes pedagogy was evident in participant's comments. Due to the clear explanations of content and explicit processes participants experienced in the bridging programme, they indicated surprise and dismay at the differences within the classroom, with assessments and with their lecturers in their BHSc programmes.

"Students perceptions of their classroom and the instruction they receive influence their achievement and attitudes" (Anderson, 2004, p. 178). The perception of academic focus and structure within the classroom were identified in this curent study. Prosser and Trigwell (1998) identify two distinct conceptions of teaching pedagogy; teacher-focused or student-focused. A teacher-focused approach focuses on what the 'expert' teacher does, aiming to transfer information to students and is similar to Freire's (1972) banking or transmission education. A student-focused approach focuses on the student and aims to develop and/or change their students understanding and is similar in emancipatory and transformative education (Freire, 1972, 1994; Mezirow, 1991, 2000). Rose's comment is illustrative of a student- focused approach: *"The bridging certificate is about learning the processes. ... and if we can master the processes, then pretty much, we'll do all right with the content. It's not necessarily knowledge, it's knowing how to learn"*. Lisa also talked of learning the processes and highlighted a difference: *"That kind of stuff they don't teach us in the degree. … they pick us up and fail us on stuff without letting us know"*. Both approaches vary in their relational and hierarchical expressions and reflect the underlying philosophy of educators.

The participants perceptions indicate the bridging educators had a more student-focused approach than the undergraduate educators. However, there is not enough evidence to

suggest the undergraduate educators were teacher-focused in their approach. Teaching strategies employed by the bridging educators tried to engage students in activities that enhanced and developed their capabilities, I can not comment on those used in undergraduate programmes. Susan noted a significant inconsistency from one of her degree lecturers who was teaching them about the importance of names in a tutorial and then in a lecture theatre said to her *"'you, up there, in the pink shirt'. It's demoralizing"*. The taught theory was not a 'lived' principle. She indicated that the value of the student as a person was called into question by the undergraduate educator not learning their names. To Susan, the values and priorities of this lecturer were explicit. Classroom experiences can enable individual students to engage in the learning processes (McClenney & Greene, 2005) however, Susan's experience was not enabling.

Participants identified learning environments in which they were engaged, able to exercise and apply their understandings, and develop their confidence. The centrality of the student in the learning environment is vital when considering the planning and implementation of tertiary learning (Anderson, 2002, 2007; Benseman et al., 2005). Opportunities for collaboration and group work (Anderson, et al. 2004; Johnson, et al., 1998; Tinto, 1997, n.d.) and repeated application of ideas allowed participants opportunities for deeper learning (Scott, et al., 2005). Educators understanding of their subject matter is known to affect their approach to teaching (Prosser, Martin, Trigwell, Ramsden & Lueckenhausen, 2005). Prosser et al., (2005) found that educators with a more integrated and holistic experience of understanding their subject are more likely to experience their teaching in more conceptual change and student-focused ways than those with a less integrated and atomistic subject focus. The integrated and holistic approach (philosophically and pedagogically) of the bridging programme may assist in locating the bridging educators towards the student centered approach.

The clear focus on individual learning in the bridging programme enabled academic and social processes, skills and knowledge to be gained. The diverse cohorts were also influential to the learning experiences of participants. Julie and Ann noted differences between themselves and younger students. "*Sometimes, it was hard being with the younger students because they weren't focused. ... I enjoyed the ones that did communicate because it gave me a different perspective ... So I liked the mixed classes*" (Julie). Literature indicates the age of the student influences the approach to learning on the 'deep' and 'surface' paradigm. Mature students have a deeper learning approach than younger students (Cantwell & Scevak, 2004; Collison & Drayton, 2002).

Previous research shows that post Year 12/13 school leavers are focused on getting the required 'grades' to get them into their chosen field of health study, a surface approach. They do not appear to perceive themselves as adult students and retain a 'banking' conception or 'vessel to be filled' mentality (Collison & Drayton, 2002). Many students come with an expectation that university will be like school and educators must consciously teach students that learning is their responsibility. This raises particular challenges for academic staff with large numbers of school leavers entering tertiary education. Collison and Drayton (2002) found a focus on assisting younger students to develop their own learning skills in preparation for entry to undergraduate study was often not well received. As Susan was the only participant under twenty years and did not reflect these attitudes in her interview, it is difficult to assess these claims. However, Susan and other participants were emphatic the bridging programme was sucessful in equipping them with the skills necessary for tertiary study and confidence in themselves as students. Rose noted: *"Because of the certificate, … if I have a question, I ask it … If I don't get an answer … then I try and look for it myself. 'Cause that's what you need to do to be successful, there is self-directed learning not spoon feeding."* As the processes of learning are made explicit and genuine engagement occurs, the student (whatever their age) is able over time to gradually assume greater responsibility for their own learning and become more independent regardless of age.

It was in a supportive bridging environment that the range of learning skills were gained and embedded. Previous educational experiences which participants brought into the programme were transformed as they learned new skills and ways to learn. While tertiary education often seems to focus on content rather than the whole person (Palmer, 1998), it seems that participants experience of bridging education was more holistic. Several participants indicated it was a turning point for their self-beliefs, confidence and learning. Rose noted: *"It did so much for me on an emotional, on every level actually"*. The educators role in creating an environment for meaningful learning and change is imperative (see Anderson, et al., 2004; McClenney & Greene, 2005; Tinto, 1997, 1998).

Engaging the affective domain can be effective in transforming the learning experience. Participants echoed previous research findings that the establishment of effective connections with bridging educators clearly correlates with academic achievement (Harford, 2002). Events and activities in the classroom influence achievement (Anderson, 2004). The participants spoke about learning being engaging and enjoyable while in the bridging programme. For many this was a first, a very different experience

from their prior education. Participants acknowledged the skills and content knowledge gained in the bridging programme, but all reported it was the understanding of the processes that was more important. *"[I]t's knowing how to learn"* (Rose). Kiri noted this saying the programme: *"helped me with my academic skills and getting a bit of confidence"* and the others comments also reflect this.

Participants identified the influence of bridging educators who had taken time to clearly articulate, demonstrate and/or give repeated opportunities to learn the 'how to' processes of learning. These included how to: *"read the booklet"* (Rebekah); *"read the question"* (Rose); *'write essays'* (Susan); *"plan an essay and time management"* (Lisa); *"behave in the exam hall"* (Ann); *"study", "do exams", "set out an essay",* and *"knowing how I learn"* [learning styles] (Julie). Comments reflect the way bridging educators made themselves available, *"'if you need anything, come and see us, we are here to help you'"* (Rose); suggest alternative ways to learn where necessary and gave clear feedback in formative work *"the certificate lecturers were picking us up on stuff, not failing us but saying this is wrong and letting us know before it got marked"* (Lisa).

The ability to apply the skills of learning in a range of situations is vital in a rapidly changing world. Gilman (1984/1997) suggested the education system leaves students *"'impoverished' compared to the potential easily within their grasp"* (p. 52). The focus on content or information and rote learning hinders students ability to fully participate in society as those who question and look beneath the surface (Norton & Wiburg, 1998). Participants identified an extensive list of skills necessary for successful tertiary study that they believed were learned in the certificate and were able to apply in their degree (see table 5.1). The underlying philosophy and pedagogy to facilitate student learning and equip them with a 'bag of tools' was apparent in their ability to identify and transfer the tools.

Participants spoke about the practical skills learnt and used in the bridging programme that were then transferred into their BHSc study. Aspects of the BHSc teaching experienced by participants indicate the pace of teaching was significantly faster, content was covered more broadly and limited or no formative feedback was given. Skills such as time management, paraphrasing, reading techniques, how to study for and sit exams, preparing and presenting verbal presentations (individually and in groups), and group work were assumed by undergraduate lecturers as being inherent. Both Lisa and Rebekah noted they *"expect you to know"*. The explicit explanations are not given. *"They write everything in the booklet, so they don't want to show you how to do it"*

(Rebekah). Julie believed that "*there isn't time… so if we don't know it we struggle*". Being able to "*read and understand the paper prescriptor*" (Rose), an overview of the paper, the assignment requirements and the marking schedule were invaluable in degree study. Yet the participants indicated that they learned the skills or significantly improved them during the bridging programme. While the transferability of skills is questioned (Bennett, et al., 1999), from a Vygotskian perspective, scaffolding, explicit instruction and repeated use in a variety of learning activities appear to be effective. For these skills to be transferred, they were also internalised and critically reflected on (Bedford, 2006; Silburn, 2005). This may have also occurred as participants participated in tutorials, one on one sessions with bridging educators, or in study groups. The range of skills and repetition of application was invaluable in transforming and embedding the metacognitive knowledge required for further learning.

The content and process links between the bridging programme and the BHSc programmes were carefully aligned to create a clear and effective pathway. In this case, success at bridging level and the desire for further learning resulted in undergraduate study within the health field. The learning and successful application of the skills necessary for tertiary level, the completion of a range of assessment tasks and familiarity with the environment enabled the bridging students to enter their undergraduate degree programme with confidence. The transferrable skills and content of the bridging papers linked to both the knowledge (content) and skills needed in the common semester of the BHSc. "*The certificate papers were really relevant to the degree course*" (Rebekah). "*The certificate took the pressure off so much to learn. It gave me an introduction…*" (Julie). The participants believed they benefited from the close links. The participants BHSc paths were varied within the Health Faculty, but further knowledge was built on a solid foundation of knowing how to learn, how to communicate and how to work cooperatively.

Interaction and Engagement in the Tertiary Environment

The bridging programme provided a range of facets intrinsic to the participants academic and personal growth and development. In the process of gaining knowledge and skills, the interactions between individuals within the university setting were influenced. Ways participants interacted within the institution, their undergraduate programme, with educators and peers was affected.

The institution

Understanding how to act and behave as a student in a university is not inbuilt when entering tertiary education. Each participant entered the bridging programme with a different history, expectations, needs, emotions and a diverse range of cognitive, academic and communication skills. The participants are somewhat representative of many of their peers. Socialisation to the university campus and the tertiary environment occurred during the bridging programme (see Huston, et al., 2001). Positive initial experiences within the institution can lead to productive engagement and connections (Anderson, 2007; Boylan & Bliss, 1997; Boylan & Saxon, n.d.). The supportive environment created by educators assisted in the adjustments required for tertiary learning, as timetables, classes and new relationships (with peers and university staff) were negotiated. As discussed above, the same level of support in the initial undergraduate programme was variable. However, the prior academic, procedural and institutional knowledge and skills gained in the bridging programme may have reduced some of the associated stress and possible negative responses.

Participants indicated that the opportunity to gain an understanding of the university context, both physical and academic, was an advantage as they continued in undergraduate study. "*I'm already in the environment ... I know what I am doing and where to go in the university. It's one of the most useful things I have learned*" (Rebekah). Awareness of the resources available at the university, such as the health services, learning support and the library (including using data bases) was particularly reassuring as the participants experienced the new challenges of their BHSc programme. Familiarity with the physical environment, the layout of the campus and the ability to access services and resources helped minimise stress levels as they transitioned into and through their degree programmes. The benefit of knowing the physical environment is particularly advantageous in the first few weeks of the undergraduate programme and may be noteworthy in reducing the stress of a new learning situation.

Educators

Anderson (2001) suggested bridging students should experience educational culture that respects the diversity of culture, class or gender. The participants highlighted the importance of their interactions with bridging educators and acknowledged they felt supported and respected as individuals. This was not limited to their time in the bridging programme but continued into their undergraduate programmes. Several participants indicated the bridging educators were interested in them as people, not just students.

Participants indicated that there was not a dichotomy, but rather a level of reciprocity in their relationships with bridging lecturers. Both verbal and non-verbal cues indicated the structure of the teacher–student relationship during the interview process. The participants described the bridging educators as "*happy most of the time*" (Susan), easy to talk to, approachable and supportive. Julie said they "*made themselves available and offered help…. when they said they were available I believed they were really wanting to be available and made themselves available, even if it was hard*". Julie indicated that this availability was not easy or convenient for the bridging educators yet they followed through on their words. Several spoke about times when they discussed 'non academic' concerns with different bridging educators, Ann called it "*love and support*".

The participants were very clear about the BHSc educators with whom they felt they could approach and those they could not. Engagement is a predictor of student success and a factor in the academic, social and emotional development of students (Kinzie & Kuh, 2004; Tinto, 2004). Engagement between educators and the participants, in meaningful ways, enabled deep learning of more than academic content to occur while in the bridging programme and the influences were ongoing. Although the participants were no longer part of the bridging programme, the connections to the educators continued. Comments such as *"the bridging lecturers were and are here for us", "you wave at us and say hi as we pass"* (Rose), *"it's great to see you all on campus, it gives me a boost, I know I can do it", "I want all of you's to be at my graduation"* (Kiri), and *"I came back to him and we talked"* (Lisa), indicate that the participants believed the bridging educators remained interested in their former students and continued to care about them and their progress. The level of ongoing contact is limited and sporadic, yet appears to be appreciated and encouraging.

Participants experienced the effects of the massification of tertiary education and large cohorts when entering the BHSc, particularly their first semester. Lectures and the limited interaction with educators were a shared comment. The transmission or banking model of education is traditional and common in lecture settings. Good educational philosophy for large numbers in both planning and design is essential (Gibbs, 1992). The contrasting and competing variables that need to be balanced and addressed include the financial and logistical constraints and the level of educator awareness. Paul Ramsden's (2003) seminal work '*Learning to teach in higher education*' draws on the nature of learning to develop sound principles for teaching. The belief that students direct their own learning process and the importance of engagement is highlighted in the

literature (see Anderson, et al., 2004; Cross, 1998; Kinzie & Kuh, 2004; Tinto, 2003). It is imperative that bridging students experience demystification and familiarity with the institution, knowledge and the processes required (Burwood, 1999; Morgan, 2003).

When speaking about their experiences with educators in the undergraduate programmes some participants were very clear about the differences. Not all educators were seen as approachable as indicated by Lisa's comment: *"Some teachers are not very nice and they didn't answer our questions at all"* and Ann noted: *"Most lecturers keep us running, they won't say anything and we have to do hard work at home"*. The classroom experiences and additional contact with educators varied in availability, but compared to the bridging educators was restricted. Some participants found that due to the large numbers in the first semester of the undergraduate degree the support was limited. Lisa noted *"...they presume we know everything and we can't get appointments to see them. ... Or if you do, you get 15 minutes and that's it. So they don't help you at all. That's what I found, it was not that user friendly"*. Participants then entered a range of BHSc programmes, none greater in student numbers than the bridging programme, and the distance and limited contact continued for some. Ann and Rebekah (in different programmes) both noted that from *"the second semester we have to do it by ourselves but we don't know that"* (Rebekah). The culture of learning participants experienced in the BHSc included a lack of support and clarification of expectations which academics know and assume are known to students (Burwood, 1999; Vandermensbrugghe, 2004). The culture may have required a level of conformity, yet during these challenges and at other times, the positive bridging experience and peer relationships were important.

Peers

Participant's reported that as a result of the bridging programme curricula and the nature of the cohort, new friendships were made, new ways of interacting with others were learned and change in social networks occurred. Their experiences in the bridging programme resulted in strong relationships that continued long after they had left the programme. For example, Kiri noted that although they were not in the same programme or even university, the connections to her former bridging peers remained: *"I made some awesome friends and even though we are studying different degrees, we all still meet up and we drink and go out"*. Rebekah, an EAL student, also noted benefits of the bridging programme and peers saying *"I make friends – Kiwi friends"* and *"Every time they see me they say hi, ask you how your feeling. I feel respect, warm and so happy by simple thing they ask me. ... That helps me when it gets hard to carry*

on". The ongoing support and relationships between former bridging students were valued in the present and into the future, with possible networking opportunities when they became qualified health professionals. The connection to peers is a significant factor in building a 'sense of community' which is known to influence retention (Cross, 1998; Tinto, 1997; Tucker, 1999).

The knowledge and skills gained in the bridging programme became important, as these students interacted with their undergraduate peers. Lisa, Ann and Julie spoke about mentoring that occurred with their undergraduate peers who had entered directly to the BHSc yet were unaware of the nature of 'study' and so required assistance. To mentor is to be an advisor or guide and includes "all the ways that we humans non-coercively help each other to learn and grow" (Gilman, 1997, p. 52). The skills of helping students fit well into this definition. Julie's comment is clear "*I found that I was helping someone that hadn't done the certificate ... The stuff that certificate lecturers take time to teach. There isn't time when we get to the degree, so if we don't know it we struggle*". The participants had gained a clear understanding of the learning processes, they had learned how to learn, to find information and other resources, and gained greater understandings of communication. All the knowledge and skills gained on the bridging programme were an invaluable part of the mentoring process.

Ongoing Success and Continuation

The range of secondary schooling and education the participants experienced caused them to be ill-prepared for tertiary study. While both Rebekah and Ann (EAL students) had gained a tertiary qualification in their own nations, the challenge of studying in English, in a different country caused some unique challenges. Yet they all admitted to have gained significant value from the bridging programme, stating that it was the bridging programme that initially enabled and equipped them to continue and be sucessful in their ongoing studies.

Changes in self-esteem and confidence were reported by participants. Self-efficacy, a person's belief in their ability to produce the desired results from their actions, is a significant predictor of academic performance (Cantwell & Grayson, 2002). The combination of confidence, improved self-efficacy and having knowledge and skills related to academic study were important factors for all the participants continuation in their undergraduate degree programme. Lisa's comment "*I would not have stayed if I hadn't done the Certificate*" is echoed by all the participants. All the participants acknowledged the bridging programme was an effective transition for tertiary study

notwithstanding that it was one to three years after being in the programme. They were able to reflect upon experiences in the bridging programme and make clear links to their successes in their degree courses, showing they also experienced significant increased self-efficacy. Undertaking a degree was a momentous change for some of the participants and all acknowledged they experienced challenges which they were able to overcome due (in part) to their time in the bridging programme.

There are numerous challenges and barriers that non-traditional students encounter. More students leave tertiary institutions prior to completing their degree than stay (Education Counts, n.d.; Scott, 2004; Tinto, 1993; Ussher, 2008). The participants experienced ongoing challenges that caused them to consider their continuation in study. Susan and Julie experienced this challenge every semester. Interestingly they were in the same BHSc programme that Lisa first enrolled in before changing her major. Julie and Susan indicated these challenges related to the educators, assessments, pressure of study and personal issues. However the cognitive, metacognitive and affective experiences of the bridging programme mediated these challenges. "*When I first started the certificate, it was like, I wonder if this dream was too big. That is where the certificate helped me realise because I succeeded there, I knew I could succeed. Without that success, I wouldn't be where I am today*" (Julie).

Engagement with educators and peers is a significant factor in learning new skills, continuation and success in study (Anderson, 2007; Harford, 2002; Johnson, 2000; Kerka, 1995; Kinzie & Kuh, 2004; Tinto, 1993; Yorke & Thomas, 2003). All the participants acknowledged the bridging programme was effective at preparing them for tertiary education, academically, emotionally and socially. Motivational aspects identified by participants include commitment, persistence and an intrinsic interest in the degree programmes which Cantwell, et al., (1997) suggests mitigate against feelings of alienation. The conscious decision to enter university study, the history of success in university study (at Level 4) was, for these students, a powerful motivating factor influencing their attitudes, which in turn inspired and propelled them on, along with the support of family and friends.

The close links and intentional alignment of skills and knowledge required in the BHSc in the bridging programmes design were another positive influence on the participants retention in undergraduate study. Explicit teaching of a range of academic skills (cognitive and metacognitive), and multiple opportunities to apply them saw these participants internalised the skills. This enabled them to effectively be applied in new

settings (their undergraduate programme). These meta-cognitive understandings were successfully transferred into undergraduate study. They identified becoming self-directed, able to apply a range of study strategies (see Table 5.1) as a result of the bridging programme. New ways of approaching learning were also evident in the narratives.

Holistic Personal Development and New Possibilities

Bridging education is essential for students lacking the required skills to succeed in tertiary education. It has provided an opportunity for participants to realise their dreams of graduating and gain improved employment opportunities, influencing themselves, their family and other relationships. Several participants discovered their potential was greater than they had previously believed and were also faced with new, alternative realities. Rose was particularly affected stating that it was in the bridging programme she realised: *"'I'm smart!!' It was just having that validation and it's helping me so so much in what I'm doing now, 'cause I am not so stressed in what I'm doing"* and this influenced the way she felt with her friends, remarking: *"I can see my friends actually listening to me now and they are interested in what I've got to say"*.

Opportunities for participants to question assumptions, beliefs and values, critically reflect and consider multiple points of view led to perspective transformation about themselves, their families and the society in which they live. The bridging programme and university appears to have developed a gradual awareness of a broader range of people and issues for participants. Lisa's comment is shared by other participants: *"It made me more interested and I think about more stuff, meeting broader people, so socially it affects you. ... It makes me think a lot more about actions and how I influence people"*.

Participants with partners or families experienced a notable change in family dynamics as the result of returning to study. Their educational experience influenced not only the individual but their families in both positive and negative ways. Return to study required renegotiation of household tasks and roles and altered time priorities. The ways in which the participants did this was not apparent. However, it was apparent that the study requirements and the teaching within the bridging programme influenced the participants and consequently they influenced others. This surpassed their expectations. Rose, Julie and Kiri spoke about the transference of skills or knowledge to their families and friends, thus in a way mentoring them. For example, as Rose gained skills and confidence in her ability and modelled the behaviours of study in her home, her children

were influenced. The significance of these processes was seen in her comments about her son: "*he wasn't interested in school. He couldn't really see any future in it ... seeing me working hard, ... studying in the evening, rubbed off on him ... he just improved so much academically, socially, everything. Even his self-esteem went up! And now he's talking about going to university and he's only 11*". Modelling and scaffolding caused incremental improvements in his educational success and attitudes. Kiri and Julie also discussed their socialising role as parents. Due to learning about the process of socialisation and experiences during the bridging programme their manner of parenting altered. Kiri consciously created opportunities for her daughter to interact with different people and Julie facilitated her sons return to education.

Former students became advocates of the bridging programme. Having experienced the programme and seen its relevance to the BHSc, Kiri, Susan and Julie have encouraged others in their social circle to complete the bridging programme first. While nationwide the number of students enrolled in foundation education courses has decreased by 20 per cent in 2005 after more than doubling between 2001 and 2004 (Ministry of Education, n.d.), this has not been the case for the bridging programme at this university. Rather, new enrollments have continued to rise since the programme commenced in 2003. There are many possible reasons for this but the voices of participants provide some explanation including the clear pathway into the BHSc and the perceived ongoing influences and benefits of the programme.

Both Lisa and Kiri noted the change in the family income was challenging. Ann was acutely aware of the added financial burden on her husband of an additional years bridging study as well as the three years to complete the degree. As an international student, the fees were considerable, yet she also recognised the value of the programme in her continued success at undergraduate level. It had enabled her time to adjust to the accent, the different styles of learning and teaching and provided a successful platform to enter her degree from. The financial adjustments and impact made during the time in which participants were students was not a significant finding and nor is it unique to the bridging programme. However, the cost of lost income and added fees for the period of bridging programme is an important factor to consider as many non-traditional students are often from low socioeconomic backgrounds (Anderson, 2001). The financial implications of academic study can also affect relationships and the future.

The social and financial incentive to participate in education and gain an undergraduate qualification are a desirable necessity in a knowledge economy (Benseman & Russ,

2001). Non-traditional students are often from low-income groups and have been marginalised by their lack of academic capital and domestic, social and financial circumstances (McClenney & Greene, 2005; Wilson, 1997). By successfully completing an undergraduate qualification, many of these marginalising factors are revoked. For these participants, the bridging programme provided a clear pathway into further education. The ongoing engagement and retention of students is vital to ensure completion of the course of study. All the participants were completing a BHSc degree at the time of the interviews. Kiri and Lisa were influenced by bridging experiences and ultimately pursued a degree different from their original intention. All the participants had very clear goals of attaining a qualification and future employment as a health professional. Lisa has since graduated and gained employment.

For all the participants, the qualification was as much about changing their own lives as it was changing the future for themselves, their families and/or their communities. Kiri and Ann clearly articulated an image of their future with a degree as enabling them to create community based health clinics for individuals from marginalised and low socio-economic groups. More than a clear goal, the images the participants had on their future was a driving force. Tucker (1999) identified 'Vision' as an important factor in the transition and retention of students from high school to tertiary education. This same vision is evident in the narratives of the participants. Freire (1972, 1994) asserted that education should cause the emancipation of oppressed groups and social change. In becoming a critically aware student, the rediscovery of power enables the participants own reality and therefore society to be transformed. While the societal transformations are not clear from this research, the seeds and shoots of change and transformation in the lives of the non-traditional and formerly underprepared participants are.

Concluding Comments

By placing the former bridging students at the centre of this research, the unique lived experiences of the influences of a bridging programme have only begun to be explored. The influences of bridging education begin at enrollment. The bridging programme appears to have established a positive and fruitful relationship to learning for the participants. Fundamental changes in beliefs about learning occurred as expectations of university-level study and the meta-cognitive knowledge were scaffolded (Cantwell & Scevak, 2004). The cognitive, metacognitive and affective domains were positively influenced by the bridging programme. This was achieved through expanding the students learning skills and giving them opportunities to use those skills in a supportive

environment. Bridging educators and the learning processes and skills used, when based on appropriate philosophy and pedagogy are effective. However, the influences of a bridging programme are not easily quantified to skills which enable ongoing success in tertiary education.

As the participants became meaningfully aware, they found and established new behaviours of learning. As they connected with new alternatives, they communicated these to others in their environment (friends, family and acquaintances) so that they too could share the gains. In so doing, the learning was internalised and shifted to a deep and powerful level. The importance of bridging to the participants ongoing education and development was definitive, going beyond themselves and academia, reaching the people with whom they associate and even reaching into the future. This thesis has shown the holistic and wide ranging effects of one programme on seven people who, like many others, were positively impacted.

Chapter 7: Conclusions

> I feel such a privilege to be entrusted with such riches, the data was all I hoped for and more. Looking back to my hopes for the research, it seems the students 'voice' about the lived bridging student experiences, of study, and in their life's journey will be heard. Having dwelt with the data and project so long, I feel some trepidation at the making public of my private journey. … I wonder if the perceived influences of this programme can be likened to a wildfire. A wildfire (the programme) changes the environment irreversibly. Seeds buried (in lives) and left dormant by past experiences and interactions are scarified. The hard walls which protected the seed are cut or softened, and germination is hastened. A little rain and a new beginning, a new landscape results. The core material exist within the bridging student, however, their potential may be unrealised. Learning opportunities in a supportive, engaging environment are like the spark igniting the flame to release the dormant possibilities. Change occurs, initially within, but as humans are not isolated or independent, the effects of the flames spread and others are affected, horizons broadened. I also wondered if Plato's beginning can happen many times "the beginning is the most important part of the work." This is simply the closing of a door, an end to one stage and then, a new beginning. To stand at the door of the unknown. Again. (Personal research journal entry, May 9, 2008)

Overview

This final chapter begins by revisiting the intent of the research and the research question. A summary of the five main findings are provided and discussed. The strengths and limitations of this research are considered and the implications on bridging and education are provided. Furthermore, recommendations for practice are made. Possible areas of future research are recommended and the thesis concludes with my final reflections.

Answering the Research Question

The teaching processes of bridging education, both philosophically and pedagogically, influence students academically and affectively. Yet the possible holistic influence on the student(s) was unclear in the literature, but evident in anecdotes from former bridging students. The main purpose of the research was to explore the participants (former bridging students) views and understandings of the influence of a bridging programme from a holistic perspective. The context of the study was former bridging students in a university Health Faculty who are enrolled in undergraduate study. Based on earlier research (such as Anderson, 2001, 2007; Bedford, 2006; Benseman & Russ, 2001; Cantwell, Archer, & Bourke, 2001; Cantwell & Grayson, 2002; Collinson, & Drayton, 2002; Giles & Alderson, 2004), I believed there would be a clear academic and affective influence of the bridging programme experienced by former bridging students. I suspected that like a stone dropped into a pond caused ripples to spread

outward, there would be further, possibly far reaching influences not directly related to academia, the findings appeared to support this.

While bridging education is not a new model or paradigm for learning and education in Aotearoa New Zealand, the multiplicity of forms and lack of contextual research on the holistic influence was a significant factor in the choices behind this research. Gaining and increasing the understanding of students experiences in bridging education and the influence of that education both at the time and ongoing, is important for tertiary education in New Zealand. This attempt to simplify the phenomena to gain further understanding must be balanced with the complexity of the situation. The students intersect with a broad range of people, processes and organisations in their educational journey both in tertiary settings and in their social world. The complexity of the phenomenon is not limited to the factors discussed in this research, but are identified as being much more diverse.

The Findings: A Summary

This thesis and the research within revealed that the influence of the bridging programme began at the participants time of enrollment and continued into their undergraduate study and their lives. Learning is a holistic growth process, moving from one state of being to another more fulfilled state of being along a transformative trajectory (Hamil, 2002).

The measure of a bridging programme is not as simple as gaining entrance to education and/or completing that qualification. In the second main finding, participants indentified cognitive and meta-cognitive growth and development as an influence of the bridging programme. The range of tertiary leaning skills and knowledge gained and/or enhanced was considerable. Close links between the academic skills taught in the bridging programme and required in undergraduate study were evident. Positive improvements in confidence, self-efficacy and motivation were also attributed to the influence of the programme. This is also directly linked with the findings below.

Cognitive and meta-cognitive growth and development were attributed to the bridging programme. There was a clear distinction made by participants between the pedagogy and underlying philosophy of bridging and undergraduate educators. The transparency of aspects of educators philosophy to the participants was a surprise. However, on further reflection, I considered that if conscientisation and transformation was a goal of the bridging programme, then this was a small indicator, that for some students at least,

the goal was achieved. This, alongside the academic preparation that occurred has potentially positive lifelong consequences.

Thirdly, the bridging programme influenced the participant's ongoing success and continuation in undergraduate study. This is closely linked to the fourth finding which revealed the programme influence on the way participants interacted with a range of people and contextual factors including: the institution; their undergraduate programme; educators and peers; and family, friends and others in society. Financial and relational challenges associated with tertiary study were also identified. It is equally acknowledged that these individuals and factors influenced the participants, facilitating or impeding their ongoing learning. The programme provided an effective bridge into tertiary education (academically, emotionally and socially). The support and engagement that occurred in the bridging programme, both personally and academically facilitated personal transformation and the demystification of academic processes. Understanding of the university culture and improved cognitive and metacognitive strategies and skills enabled potential challenges to be overcome and academic success to be gained.

The final and perhaps most interesting finding is the holistic personal development that occurred. As the skills and knowledge were gained and developed by participants, a deeper personal change in confidence, self-efficacy and motivation also emerged. It would appear that the change and growing knowledge and skills transferred and extended from academia into other areas of the lives of former bridging students. They were an influence on their family, friends and to some extent their communities and society. Children were positively influenced academically, socially and emotionally. For example, Rose's son: *"he just improved so much academically, socially, everything. Even his self-esteem went up!"* Partners and friends were influenced as knowledge and skills were shared.

The influence of the bridging programme has enabled new opportunities, ways of being and employment possibilities which will influence the futures of all participants. As the bridging programme created opportunities for success in tertiary education, health clinics for Māori and people in another nation are becoming more than a dream, but a reality which two of the participants continue to move towards. Growth in the participant's knowledge, skills, competencies and attributes has and/or will facilitate personal, social and economic wellbeing. Overall it could be claimed that the influence of a bridging programme was an holistic one.

Strengths and Limitations

A particular strength of this thesis is the comprehensive nature of the literature review. The two literature chapters examined the New Zealand tertiary education context and the role and influence of bridging education. The synthesis and summary of relevant literature provided a contribution that draws together the disparate themes of previous studies into a coherent and up-to-date collection. Despite there being a number of studies on bridging education, this thesis is possibly unique in providing a multi-contextual and holistic focus.

In understanding the student's perspectives of the influence of a bridging programme, another of this thesis' strengths is the highlighting of the apparent successes of the bridging programme under investigation. For example aspects of that programme have been identified which enable reciprocity and engagement between educators and students. These students have internalised and applied the skills (both cognitive and meta-cognitive) in a range of settings, not limited to the university. The identification of the transferability of skills learnt was another strength made apparent in this research.

This thesis may assist in ensuring the ongoing development of bridging educator and education practices. It could be used as an example of the range of aspects to be considered when working with the complex and diverse needs of bridging students. This research can inform both bridging and undergraduate educators of the relevance of engagement in the learning and teaching interface and of factors influencing non-traditional and under-prepared students.

While not an intended outcome of this research, the data on the holistic and multi-contextual influences on former bridging students could in the future be of significance for theory development. By adding to the limited literature on this topic, the holistic nature of education could be focused on to build, or extend current theory.

This thesis may be used to inform policy decisions at the level of: the programme; Faculty; and University in the future to support the university's stated commitments to equity and excellence. For example, the relevant literature and findings can update those responsible for programme design and implementation which is based upon appropriate bridging philosophy and pedagogical models (representing a further strength).

Bridging education is inherently an issue of social justice, equity, and action, and by raising and reporting the lived experiences of former bridging students I hope to see a better alignment of policy, philosophy and practice. Avenues for further

conscientisation and action will also occur in terms of further research publications of these findings in the future.

While I hope the strengths of this research would outweigh any limitations or omissions, I am aware there may be some, including the following. I believe the small-scale and resulting method of participant selection was a limiting factor in this research. While a case study approach does consider the richness and variety of individual experiences, the scope of this research did not allow for a wide representation of a broad range of experiences. Therefore, the findings can not be considered as representative of all students involved in on-going study following bridging education. However, given that this is a small-scale qualitative study of merely a range of former bridging students, its purpose was not necessarily to be representative, but possibly indicative.

Furthermore, not all students who successfully complete papers in the bridging programme are successful in their endeavours to gain an undergraduate degree. These students and their experiences were not part of this study, and they too may have a contribution. This issue was however, outside the scope of this current research and would be a topic worthy of further investigation in an alternative thesis or research project.

My inexperience as a researcher could be seen as a potentially limiting factor to the study. There was data that I wanted to include but could not, and ways of reporting my supervisors advised me on during the process. I have learnt much about research by completing this study. Like the students' stories reported in this thesis it is in the 'doing' or application, that understanding comes. My commitment to bridging education has driven this research process, and I am aware that my employment and personal factors may have resulted in some bias. However, through literature, discussions with supervisors and other researchers, and the research journal, an understanding of the possible hazards inherent in the research process were apparent and so able to be diminished.

Despite these limitations, upon further reflection, the scope of this thesis was modest and its feasibility practical for a Master of Education thesis. This research has given me a greater understanding of both the programme and its influence from the students' perspectives. The insight into the participants' experiences and the complexity of their lives has been a privilege. I believe it has, and will continue to influence my practice, and I hope the practice of other educators. Several participants commented they gained or benefited from the opportunity to reflect on their experiences, this reciprocity was an

unexpected benefit. I trust that any potential weaknesses were outweighed by its multiple strengths.

Recommendations

Following consideration of the multi-contextual and holistic influence of a bridging programme on students, from the student's perspectives, I propose the following recommendations:

The initial information prospective students receive is a significant factor influencing the initial interface between the individual, the university and the programme they enter. To minimise confusion and disappointment in the enquiry/application process the university should ensure:

1. Clearer information on the website linking the bridging programme to degree programmes is available. A brief outline of those it may benefit and the benefits of the programme. A clear 'link' to the bridging programme page should be included.

2. Advice given to students enquiring about degree programmes should include discussion of the bridging programme, those whom it is for and the benefits.

3. A range of partnerships with under-represented and non-traditional student groups. This may allow more effective forms of recruitment through community networks (Anae, Anderson, Benseman, & Coxon, 2002; McKegg, 2003).

The evidence of a range of pedagogy and the underpinning philosophies in this research was clear. Pedagogy and philosophy are often not well articulated by educators (Morgan, 2003). To promote effective coherent teaching and learning, the university, bridging and other programmes could:

4. Provide 'training' on a range of philosophy that underpins educational pedagogy, and/or assist programmes to develop a philosophical and pedagogical stance which all lecturers could incorporate into their practice. This must include a range of strategies suitable for the multi-ethnic range of students with the aim of improving engagement with students and learning.

5. Provide forums for the range of university personnel promoting the value of interaction and engagement with students, with clear philosophical and pedagogical links.

6. Aspects of the philosophy and pedagogy of the bridging (and other) programmes could be formalised to ensure a coherent understanding of those who work in that field.

7. Coherent links and alignment (where possible) made between bridging programmes and the first year of undergraduate study in regard to both pedagogy and philosophy.

Future Research

The focus on foundation students in government strategy is one which will ensure the place of bridging programmes for some time. A significant number of non-traditional students enter universities and other tertiary institutions each year. Although this research is based on a small group, it indicates a 'snap shot' of the current situation for bridging students. Future research based on these research findings could establish the significance of the factors identified and include a focus in a number of directions, such as:

1. Participants in this study indicated that they were continuing their studies because of the bridging programme. Causal comparative research which explores the influence of pre-exisiting conditions on a variable (Charles & Mertler, 2002) could be conducted to examine this and other reported influences.

2. Exploration of the differences and similarities between former bridging students and those who gain direct entry to undergraduate degree programmes could be unertaken in terms of comparative research. The focus could include a variety of areas including initial experiences, achievement, engagement and tertiary learning skills.

3. Questions of empowering students are raised by this research and this would be a possible focus for further research exploring the 'power-relationships', related to gender, ethnicity and students being treated according to their needs. This would focus on exploring teacher student relationships with non-traditional students.

4. Examine the range of philosophy and pedagogy used in (bridging) programmes and by educators.

5. Investigation of the skills taught and used in bridging programmes (such as those identified by Bennett, Dunne & Carre, 1999) and the extent to which they are transferable to undergraduate study.

Personally, I am interested in pursuing the following:

6. Further exploration of the multi-contextual influences impacting those who are not engaged and withdraw. This would be useful further research as tertiary and bridging education is not successful at retaining all those who enroll.

7. Exploring the links between bridging programmes and their holistic influence with a broader focus (multi-site). In altering the research to include quantitative and qualitative methods, a wider range of data could be gained and perspectives explored.

Final Reflections

As a bridging educator I feel privileged to be a part of the academic journey many students make. I have a vested interest in the progress of students who enter the bridging

programme, to ensure the potential within has the best possible chance of being realised. Working with bridging students over the past five and a half years, I have seen many lives transformed. Sadly, I have also seen many students who appear to remain unchanged, unwilling to attend class or commit the time to study, who do not suceed. For many, a bridging programme can be an effective influence towards meaningful change, but unfortunately, not for all.

Students in this study entered the bridging programme as a way to change their lives, by gaining access to an undergraduate degree programme and ultimately a career in the health field. However, in the process they began to 'see', new possibilities and ways of 'being', a new future, one that in their words would not have been possible without the programme. The bridging papers the participants completed were effective specific preparation for health focussed undergraduate degree programmes. While seeking a more holistic view of the influence of bridging education I am not so näive and idealistic to believe that this study captures all the relevant components; that is a chimera. Systematic attention to foundation and bridging education and its impact must continue. There must also be considerable ongoing effort placed in all areas of education to try and improve the learning outcomes for all New Zealanders. This could, in the long term minimise the need for bridging and foundation education.

The research question, methodology chosen and resulting outcomes of this research have been, in my opinion, a success. A small snapshot of the multi-contextual influence of a bridging programme was gained. I have come away from this experience with greater understandings of the programmes, educators and students involved, and the complexity of the research process. New adventures and new challenges lie ahead. In this study, while all the participants perceived the changes as hard and challenging at times, it was overwhelmingly positive and ultimately worth it. My personal journey will continue, as there is perhaps a doctorate to be attempted in the future, but this experience has crystallised my resolve for continuing issues of social justice and the opportunities to make a positive difference in the academic potentialities of the lives of others.

Appendix I: Participant Information Sheet

Project Title:

The ongoing influence of bridging education: A case study of AUT Certificate in Health Studies students in undergraduate study.

Date

Dear _____

You are invited to participate in important research on the influence of the Certificate in Health Studies (CHS) on students who are continuing in an undergraduate degree programme. Only students who have successfully completed four to eight papers in the Certificate in Health Studies and are continuing in further undergraduate study (for more than one year) have been asked to participate.

What is the purpose of the study?
The aim of this project is identify your perceptions of how the CHS has influenced you, academically, personally and/or socially. This will help to bring further understanding and evidence of the influence bridging education has on students. This may also assist the Certificate in Health Studies staff to implement efficient strategies that will further assist more students in their studies.

What happens in the study?
Participants are asked to attend an interview with Catherine Walker that will take approximately 45 minutes. There are several questions, which ask you to discuss your experiences that show how the Certificate in Health Studies has influenced you. The interview will be audio-taped. This will be transcribed (by Catherine) and you will be asked to read and approve the transcription so the data can be used.

What are the discomforts and risks?
There are no perceived risks in this research. There may be some psychological discomfort if you remember experiences while on the Certificate in Health Studies that were difficult. If necessary, the AUT counselling service is available to help.

What are the benefits ?
This is also an opportunity to participate in an important area of research. In New Zealand, only 30% of people complete the certificate in which they are enrolled, and only 17% go on to further study (Scott, 2003). Your experiences and perspective will offer a unique and valued contribution as to the ongoing influence of a bridging programme – the Certificate in Health Studies. The information may be used to improve the effectiveness and inform future changes of the Certificate in Health Studies programme.

How will my privacy be protected?
The information collected will be stored securely /under lock and key in an office and be destroyed at the end of six years. Your privacy and confidentiality is assured and all data collected from participants will be coded and made anonymous in any analysis and subsequent reports.

How do I join the study?
By contacting Catherine by phone or email and arranging a time for an interview. It is anticipated that the interview will take approximately 45 minutes to complete.

Opportunity to consider invitation
Participation is voluntary and you can decline to participate without giving reason or being disadvantaged. You may also withdraw any information gathered in the interview at any time prior to the completion of data collection.

Opportunity to receive feedback on results of research
A summary of the study will be available and distributed to the participants if requested.

Participant Concerns
Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor – David Giles.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Madeline Banda, madeline.banda@aut.ac.nz , 917 9999 ext 8044.

Researcher Contact Details: Catherine Walker (Researcher)
Division of Public Health and Psychosocial Studies
Office Number: AR319
Phone:09-9219999 Ext 7025
email: catherine.walker@aut.ac.nz

Project Supervisor Contact Details: David Giles (Supervisor)
School of Education
Phone:09-9219999 Ext 7344
email: david.giles@aut.ac.nz

Many thanks for taking the time to read this information, and completing and returning the questionnaire.

Warm regards,

Catherine Walker
Researcher & Lecturer
Certificate in Health Studies

Date Information Sheet Produced: March 22nd 2006

Approved by the Auckland University of Technology Ethics Committee on 5th May 2006 **AUTEC Reference number** 06/62.

Appendix II: Consent to Participation in Research

Title of Project: **The ongoing influence of bridging education: A case study of AUT Certificate in Health Studies students in undergraduate study.**

Project Supervisor: **David Giles**

Researcher: **Catherine Walker**

- I have read and understood the information provided about this research project (Information Sheet dated 22nd March 2006.)

- I have had an opportunity to ask questions and to have them answered.

- I understand that the interview will be audio-taped and transcribed.

- I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.

- If I withdraw, I understand that all relevant tapes and transcripts, or parts thereof, will be destroyed.

- I agree to take part in this research.

- I wish to receive a copy of the report from the research: tick one: Yes   O   No   O\

Participant signature: ....………………….

Participant name: ………………..………………………………………

Participant Contact Details (if appropriate):

………………………………………………………………………..

………………………………………………………………………..

Date:

Approved by the Auckland University of Technology Ethics Committee on 5th May 2006. **AUTEC Reference number** 06/62

Note: The Participant should retain a copy of this form.

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