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Clare Christine Freeman *Edith Cowan University*

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Transformational Learning in a First Year Western Australian Bachelor of Education Primary Course

A thesis submitted to the

Faculty of Education and Arts

School of Education

Edith Cowan University Perth Australia

In fulfilment of the requirements for the degree of

Doctor of Philosophy

By

Clare Freeman

Graduate Certificate of Education. Monash

Bachelor of Arts Training and Development. ECU

Master Training and Development. ECU

The declaration page is not included in this version of the thesis

Abstract

In this study the experiences of commencing first year Bachelor of Education (Primary) students were investigated. A mixed methods approach was used consisting of an online survey and 12 questions that were asked in interviews with students who agreed to be interviewed. The online survey data was developed using QualtrixTM software and the results of the survey responses were analysed using the available features in QualtrixTM. The survey responses indicated that students were motivated to become teachers however they found the academic study work load difficult. To accommodate the study load required students to find several hours in an already busy life world consisting of parenting and financial responsibilities. The results of the online survey show strong agreement with the line-by-line coding process applied to the interview responses. Some questions in the online survey were adapted from the First Year Experience Questionnaire for reliability, in particular those relating to Comprehending and Coping. This group of questions together with the 12 interview questions were mapped to selected phases of Mezirow's (1991) phases of transformational learning allowing identification of the phases of transformational learning experienced by students.

All students experienced one or more phases of transformational learning. Both groups of students surveyed and interviewed were passionate about becoming a Primary School Teacher and valued the support of their families. However, all students reported being overwhelmed by the academic study load. The mature age students reported reduced financial income, child care, being dependent on a spouse and finding it difficult to devote enough time to study at home as significant problems that they believed could determine whether or not they would be able to keep going in the course. School leavers were overwhelmed by the study load and lacked the time management skills to effectively implement a solution to their problems.

Acknowledgements

I would sincerely like to thank my supervisors Dr. Geoffrey W. Lummis, Professor Christine Ure, and Associate Professor Graeme Lock for their wisdom, advice, support and encouragement. It is very much appreciated.

Glossary of Terms

Academic Discourse:

Discourse used by a community of scholars to theorise and debate the position of other academics.

Northedge, A. (2003). Rethinking teaching in the context of diversity. *Teaching in Higher Education* 8(1), 17-32. doi: 1080/1356251032000052302.

Analogic Abductive Reasoning:

Abductive reasoning moves from a concrete experience to an abstract realisation

Mezirow, J. (2003). Transformative learning as discourse. *Journal of Transformative Education 1*(1), 58-63.

Blackboard TM: On Line Learning Management System

Communicative Knowledge: Communicative knowledge is based on our need to understand each other through language

Habermas, J. (1984). *The theory of communicative action*. (T. McCarthy, Trans. Vol. 1). Boston, MA: Beacon Press.

Content Reflection: Reflection on one's psychological assumptions

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Emancipatory Knowledge: Knowledge that is generated through self-reflection, growth, development and freedom

Habermas, J. (1984). *The theory of communicative action*. (T. McCarthy, Trans. Vol. 1). Boston, MA: Beacon Press.

Epistemic Assumptions: The assumptions a person holds that justify the validity of their attitudes, values and beliefs

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Hypothetical Deductive Reasoning: Reasoning based on the development of a hypothesis, the truth of which is ascertained through observation of measurable quantities

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Instrumental Knowledge: Instrumental knowledge is that which allows us to manipulate and control the environment, predict observable and social events and take appropriate actions

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Lifeworld: The total of experiences, attitudes, values and beliefs adopted as a result of cultural codes, customs, norms and behaviours

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Liminal Phase: A phase of learning where an individual reflects upon new knowledge before acting upon it

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Meaning Perspective: The values, attitudes and beliefs through which a person engages with the world around them

Mezirow, J. (1978). Perspective Transformation. *Adult Education Quarterly* 28(2), 100-110.

Perspective Transformation: A fundamental change in the way a person sees and acts in the world. The transformed perspective is more discerning and integrative of life experience

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Premise Reflection: Reflection on the validity of one's attitudes, values and beliefs

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Process Reflection: Reflection on the social customs and norms that have formed ones attitudes, values and beliefs

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Psychological Assumptions: The assumptions a person holds about who they are and what these assumptions say about their identity

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Socio-cultural Assumptions: The assumptions a person holds that have been formed by social values and norms

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Technical and Further Education (TAFE): The major Australian provider for vocational education and training.

Transformational Learning: Transformational learning is a deep shift in perspective during which habits of mind become more open, more permeable, and better justified

Mezirow, J. (1991). *Transformative dimensions of adult learning*. San Francisco, CA: Jossey-Bass.

Tribal Discourse: Personal discourse used in everyday life that allows us to communicate within a framework of social customs, codes and norms

Northedge, A. (2003). Rethinking teaching in the context of diversity. *Teaching in Higher Education* 8(1), 17-32. doi: 1080/1356251032000052302.

Workplace Discourse: Discourse concerned with delivering services, meeting quotas and protecting the business or organisation

Northedge, A. (2003). Rethinking teaching in the context of diversity. *Teaching in Higher Education 8*(1), 17-32. doi: 1080/1356251032000052302.

Acronyms

ABS: Australian Bureau of Statistics

AQF: Australian Qualification Framework **ATAR:** Australian Tertiary Admission Rank

B.Ed-P: Bachelor of Education Degree – (Primary)

CALD: Culturally and Linguistically Diverse

DIIRSTE: Department of Industry, Innovation, Science, Research and Tertiary

Education

FIF: First in Family

ICT: Information and Communication Technology

NESB: Non English Speaking Backgrounds

OECD: Organisation for Economic and Co-operative Development

PhD: Doctor of Philosophy

SEDB: Socially and Educationally Disadvantaged Backgrounds

SEIFA: Socio Economic Indexes for Areas

SES: Socio Economic Status

SPSS: Statistics Package for the Social Sciences

STAT: Special Tertiary Admission Test **TAFE**: Technical and Further Education

TEQSA: Tertiary Education Quality and Standards Agency

TISC: Tertiary Institutions Service Centre **TL** Transformational Learning Theory

UK: United Kingdom

UPC: University Preparation Course

USA United States of America

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Personal Background

I have been working in the field of adult education since 1997. Commencing as a lecturer and tutor in the community access program at a Victorian TAFE, I taught mathematics and information technology. In 2000 I moved to Western Australia and held positions as a sessional lecturer and tutor at several TAFE campuses. In 2008 I commenced working in a university preparation course. Between 2008 and 2011, I worked in the university preparation course as a sessional tutor, unit coordinator and learning advisor in the disciplines of mathematics, academic writing and research skills. Using a facilitated adult learning approach I developed the course materials for the humanities unit. This unit was subsequently coordinated by other academics while I took on the role of tutor and learning advisor.

In 2012, I accepted a role as a tutor in the On-track program at another University. The program provides a non-traditional entry pathway for students from social and educationally disadvantaged backgrounds. In 2013 I accepted a position at a third University as a lecturer with The Learning Centre. My role there was to provide statistics support for international PhD students and to develop new Learning Management System units.

The above roles have developed my understanding of adult education, and more recently first year university students. My Master of Training and Development (2009) extended my knowledge of transformational learning theory and this theory now forms the basis of the conceptual framework for my PhD.

My research seeks to explore transformational learning for first year Bachelor of Education (Primary) students at an Australian University. The study will provide an opportunity to understand the learning experience of these students as they adapt to the requirements of the university learning environment. An enhanced understanding of student experience will help the school of education respond to important issues regarding student support and student retention.

Clare Freeman

Preface

A Brief Biography of Jack Mezirow.

Emeritus Professor Jack Mezirow, the father of transformational learning theory died in September, 2003 at age 91. Working at Teachers College, Columbia University he believed that adult learning theories of the time focussed more on gaining skills than offering students an environment in which to further develop. Born in 1923 in Fargo, North Dakota, John D. Mezirow earned his bachelor's and master's degrees in Social Sciences from the University of Minnesota and a doctorate in adult education from the University of California at Los Angeles. He worked as a consultant in adult literacy and community development in Asia, Africa and Latin America for the United Nations Development Program, the United Nations Educational, Social and Cultural Organization and the United States Agency for International Development, as well as for the Asia Foundation and World Education. After directing extension programs at the University of California, he joined the faculty of Teachers College in 1968 as Professor of Adult and Continuing Education. Inspired by his wife's experience he undertook a massive study of women returning to study in community colleges in the USA to identify factors that either impede or facilitate the learning experience. Those factors are now embodied in his 10 phases of transformational learning.

Mezirow was influenced strongly by the work of John Dewey and Thomas Kuhn together with Paulo Freire's theorizing of conscientization, or critical consciousness of the world; and, in particular, Jurgen Habermas's theory of communicative action, which holds, among other things, that the different social sciences must co-exist "under one roof" in a dialogue aimed at emancipating human thinking.

The lasting legacy of Mezirow's transformational learning theory is the fact that academic researchers are currently using Mezirow's theory and his definition of perspective transformation as the theoretical underpinning of their research.

Researchers currently using Mezirow include, Benson et, al. (2014), Cranton, P. & Hoggan, C. (2012) and Taylor, E. W. (2007).

Chapter One - Introduction

The current study examines the experience of commencing B.Ed-P students as a lens to broader issues affecting first year pre service teachers with regard to Australia's complex and frequently changing educational landscape as described in Chapter two. Without acknowledging Australia's educational landscape it would be impossible to position student experience and teaching and learning practice in any meaningful context. These additional issues will be presented in this study in order to raise awareness of the impact on academic teaching staff and students alike.

Studying a cohort of commencing Bachelor of Education - Primary (B.Ed-P) students studying at a Western Australian University in Perth found that transformation of attitudes, values and beliefs was occurring during the first four weeks of undergraduate study. For many new students commencing a course of undergraduate education is a time of challenge and adjustment as they become familiar with the requirements of university study and their role as a student. Adapting the requirements of study with other life responsibilities leads to a critically reflective position in which students seek ways to integrate the new experience with their existing lifeworld. The B.Ed-P accommodates a diverse range of student backgrounds: for example, students moving from secondary schools adjusting to the requirements of a student-centred learning environment will mix with students who are single parents raising children on their own; mature age students with prior careers trying to cope with reduced income; or other students with other diverse backgrounds. As an outcome of this new tertiary learning experience, students will undergo both psychological and socio-cultural transformations, as they reassess prior ideas, expectations and develop new relationships with academic teaching and support staff and their peers.

Research Questions

The research questions for the current study are presented here to allow the reader to gain a clear insight into the nature of the current study. For convenience these research questions are repeated in Chapter 3 on page 94.

- 1. How do pre-service teachers experience their first year at higher education?
- 2. What evidence of transformational learning exists for first year education students engaged in a university undergraduate degree?
- 3. To what extent can a model for transformative learning apply to first year university education?

Massification of the Australian Tertiary Sector

The 'massification' of the Australian tertiary sector (Dobson, 2001) has seen the inclusion of commencing undergraduate students from diverse backgrounds (Bradley, Noonan, Nugent & Scales, 2008) as well as students with complex learning needs. This has occurred during a time when the percentage of Commonwealth funding to the sector has decreased. Shortfalls in base funding of up to 30% have resulted in increased student to staff ratios and limited resources for academic support for students with diverse learning needs. With undergraduate enrolments growing at a greater rate than government projections, universities are increasingly limited in meeting retention and participation targets (Group of Eight, 2011; Lomax-Smith, Watson, & Webster, 2011).

Research into students' experience in their first year of undergraduate study has been of concern to university management, educators and government policy makers for several decades (Arvanitakis 2014; Brinkworth, McCann, Matthews, & Nordstrom, 2009; Devlin, Brockett and Nichols, 2009; Hillman, 2005; James, Krause & Jennings, 2010; McInnis, 2001; McInnis & James, 1995; O'Shea, 2011; Scutter, Luzeckyj, Burke da Silva, Palmer, & Brinkworth, 2011). Therefore, in the context of tighter university budgets and growing concerns over student retention, there has been an

increase in related research (Arvanitakis, 2014; Benson et al., 2014; Lizzio & Wilson, 2005; McInnis, 2001; McKenzie & Schweitzer, 2001; O'Shea, 2011) aimed at better understanding the nature of first year study, how students identify themselves as first year learners in the broader university community and the implications for university teaching and practice.

McInnis (2001) suggested that future research into first year experience should include examination and analysis of the process or processes operating in the student centred environment that characterises university teaching in order to better understand student expectations. Students no longer enter university solely from the liberalist humanist view where expanding the mind and the search for truth was of paramount importance, but rather enter university to complete a degree in order to obtain a well-paid job. This approach is a utilitarian or neoliberalist one as distinct from the earlier liberalist humanist view (Laming, 2012; Zepke, 2014). Therefore, with massification and a reduced funding commitment from the Australian Commonwealth Government, academic failure and attrition within first year student cohorts (Arvanitakis, 2014; Crosling et al., 2009, Krause, 2011; McInnis, 2001; McInnis & James, 1995) has become an essential research focus. Research into understanding students' attitudes, values and beliefs provides an opportunity to identify problems that may lead to failure or deferral, thus accommodating equity and inclusivity, as well as organisational sustainability for universities.

Dawkins (2104), in a review of proposed changes to Higher Education funding and restructuring by the Abbott Commonwealth Government, identifies that the privatization of universities may lead to increases in undergraduate fees and increased Higher Education Contribution Scheme (HECS) repayment fees once a student has graduated.

This could lead to students from low SES and other underrepresented groups being unable to attend university as they have been doing due to the massification of higher education (Bradley et al., 2008). The possibility of increased student fees and accumulated HECS debt could amount to a return to the situation prior to the Bradley et al., (2008) recommendations where students from low SES and other underrepresented groups will not be able to enrol in undergraduate study.

Student retention

Retention, a major issue for Australia universities (McKenzie & Schweitzer 2001; McInnis, 2001, McInnis & James 1995; James et al., 2010; Krause, 2011), measures the number of first year students progressing to the second year of study. Retention in first year study is also an indicator of the teaching and learning practices that promote successful completion of first year study. The following table shows retention figures for Western Australian universities for all commencing undergraduate students in the period 2001 to 2010.

Table 1.1

Retention Percentage for all Western Australian Universities

| Tterention 1 | | 180 701 | 11 65 | 1011111 | isti cittei | | rstites | | | |
|--------------|------|---------|-------|---------|-------------|------|---------|------|------|------|
| Western | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Australia | | | | | | | | | | |
| University 1 | 82.7 | 80.1 | 81.0 | 83.5 | 82.2 | 83.1 | 80.2 | 82.9 | 83.3 | 81.2 |
| University 2 | 75.7 | 72.2 | 76.0 | 76.1 | 76.3 | 74.9 | 75.6 | 76.5 | 86.6 | 76.1 |
| University 3 | 78.5 | 77.0 | 75.0 | 77.2 | 77.1 | 74.1 | 73.7 | 76.1 | 73.3 | 74.9 |
| University 4 | 86.1 | 87.0 | 86.9 | 87.5 | 86.9 | 87.3 | 86,9 | 86.9 | 86.3 | 86.9 |
| State Total | 80.4 | 79.6 | 79.8 | 80.8 | 80.3 | 79.0 | 79.0 | 80.9 | 80.4 | 79.9 |
| | | | | | | | (- | | | |

(DIIRSTE, 2012)

University-2 and University-3 have the lowest retention of all Western Australian universities compared with the retention figures for University-1 and University-4. The mean retention (Department of Industry, Innovation, Science, Research & Tertiary Education, 2012) over this time has shown no significant improvement for Western Australian universities. Over this same period, state total values (DIIRSTE, 2012) reveal that Victoria, with 85%, has the highest retention of Australian states while Queensland, with 80%, has the lowest. Western Australia, with 82%, retention is in the lower half of providers nationwide. Examination of the reason why retention has not improved suggests that many first year students find that the course they enrolled in does not provide them with the skills and knowledge that they expected it would. Many students in this category elected to enrol in a different course that they believed would better suit their requirements (James et al., 2010).

The retention rates in higher education within the United Kingdom and the United States of America reflect those countries approaches to dealing with student non-

completion (van Stolk, Tiessen, Clift, & Levitt, 2007). As in Australia, the United Kingdom reports an 80% retention rate measured as the number of commencing undergraduates who enrol in second year subjects. The large number of private providers in the United States makes calculation of retention statistics difficult for that country; however, some providers claim a 70% retention figure in promotional material. While exact comparisons are difficult Australia's retention figure of 80% is comparable with and in some cases better than other countries. The retention figures for University-2 School of Education obtained from the Head of the School show that retention for the school is lower than the mean for providers. (Personal communication from Head of School University-2)

Table 1.2 *University-2 School of Education Retention Percentages*

| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------|------|------|------|------|------|------|
| 68.6 | 73.8 | 71.3 | 70.1 | 71.4 | 70.4 | 69 |

Student withdrawals carry a cost to the school and faculty measured in resources invested in provision of first year study. Improving retention would reduce this cost while having the potential to redirect any financial savings into new subjects, improving teaching practise and being able to engage in activities that could better engage new students (Crosling et al., 2009; Krause, 2011).

Massification and the Australian Context

Emeritus Professor Denise Bradley, the former Vice-Chancellor and President of the University of South Australia, is a noted higher education administrator with special interests in educational equity. In 2008 she and others chaired an investigation into higher education in Australia. The resulting report, from this investigation, Review of Australian Higher Education: Final report (Bradley et al., 2008), addressed the need to make higher education available to a greater cross section of Australia's population and recommended that by 2025, 40% of Australians between 21 years and 35 years of age should have a Bachelor level degree. The review also recommended that there should be greater participation in higher education by people from low Socio Economic Status (SES) and other underrepresented backgrounds, including those with

social or educational disadvantages, as well as Aboriginal and Torres Strait Islanders. A second target recommends that by 2020 at least 20% of new enrolments should be comprised of people from low SES groups.

To meet the Bradley et al. (2008) recommendations, and in an attempt to meet the 2020 target, Australian universities have increasingly accepted enrolment into first year undergraduate degrees through non-traditional pathways (see Figure 1.1). These include the portfolio entry, Special Tertiary Admission Test (STAT), Technical and Further Education (TAFE) Certificate III and Certificate IV. This has resulted in a shift in the demographic of first year cohorts from one that was predominantly drawn from school leavers to one that includes the above-mentioned groups and school leavers.

The requirement for universities to enrol increasing numbers of students from low SES backgrounds has resulted in many approaches to achieving increased representation in first year undergraduate cohorts. In all cases, increasing support for undergraduates has been a commonly adopted strategy. However, providing academic support for these students requires funding for first year learning advisors, stretching an already limited budget with which the Schools or Faculties have to provide these services.

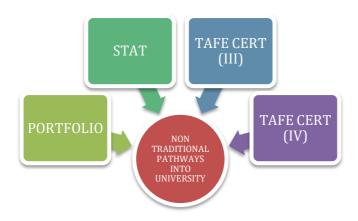


Figure 1.1. Entry Pathways for Commencing Undergraduates

The consequences of this enrolment procedure include an increasingly diverse first year student cohort with increased representation of students who are the first in their family to attend university (FIF), mature age entrants, those from low SES areas, non-English speaking backgrounds (NESB), socially and educationally disadvantaged

backgrounds (SEDB), culturally and linguistically diverse (CALD), and Indigenous backgrounds (see Figure 1.2).

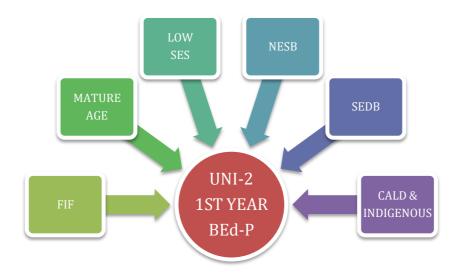


Figure 1.2. University-2 B.Ed-P Student Diversity

Low SES areas are identified by postcode: for example, some 570 postcodes in Perth and rural Western Australia have been classified as low socio-economic status (Australian Bureau of Statistics, 2011). Students from non-English speaking backgrounds face more than just language issues since cultural values play a large role in determining the expectations of what the learning experience will be like. Mature age students are typically trying to balance financial responsibilities as well as adapting to the role of being a student. In many cases, mature age students have foregone financial income in order to undertake study, often relying on reduced paid hours, or the income of a spouse or other family member. Those from socially or educationally disadvantaged backgrounds include rural and remote students who have not had the same level of access to study as their city counterparts or who have experienced some form of family disruption that has limited their opportunities to undertake further education (Bradley et al., 2008; James et al., 2010).

Equity in education

The increasing enrolment into undergraduate courses of low SES and underrepresented groups (Bradley et al., 2008) has resulted in a more accessible

system of education that acknowledges the potential of students from those backgrounds. The Melbourne Declaration on Educational Goals for Young Australians (2008) describes the role of education in providing young Australians with access to an education system that allows them to reach their full potential and be able to compete in the global economy on knowledge and innovation. Globalisation is increasing the demands to be successful in the world market place. A key responsibility of Australia's educational policy is not restricted to completion of secondary school. If Australia is to be competitive in a knowledge based global economy the education system must also encourage participation in further education and training. While the Australian education system performs well against that of other Organisation for Economic and Cooperative Development countries (OECD, 2010), there is a need to increase the participation of Indigenous Australians and improve the representation of other underrepresented groups. In order to achieve these goals The Melbourne Report (2008) identifies two key goals that form the focus of Australian education.

The first goal is that Australian education should promote equity and excellence, while the second goal is that all Australians become successful learners, confident and creative individuals, and be active and informed citizens (The Melbourne Report, 2008). While these goals can be stated in words and phrases achieving them is a far more complex process. Principle to achieving those goals is that university teachers are provided professional development opportunities to enable them to develop skills that will allow them to model improved social cohesion, improved participation of socio-economic disadvantaged groups and provision of learning activities that allow students to maximize their own unique learning skills and abilities (The Melbourne Report, 2008).

The lifeworld of Bachelor of Education Primary students

Students have a need to incorporate their university experience with their existing values, attitudes and beliefs. These existing values form the student's lifeworld and represent the context through which new experience is evaluated and understanding derived from meaningful interpersonal encounters with other students and university teachers. The values and beliefs that constitute the lifeworld shape a student's

relationships with family, friends, peers, employers, colleagues and their sense of personal identity as a student, as well as how they perceive their role as a learner in the University-2 B.Ed-P course (Cranton, 2002; Cranton et al., 2004; Habermas, 1984; Mezirow, 1991; Northedge, 2003).

A student's lifeworld is not a static entity or personal characteristic, rather it is the sum of the dynamic processes of acknowledging new experience, critically reflecting on that new experience, and deciding on a course of action to deal with the new experience. Therefore, a student's lifeworld can be seen as the horizon between existing understandings and the recognition that a new experience will require new understandings, if authentic meaning is to be derived from it (Mezirow, 1990).

Adjusting to reduced or limited income and managing the study workload while adjusting to the university learning environment was reported by most B.Ed–P students interviewed. Additionally, the need to assimilate with the social environment of university study was a significant adjustment facing most students (Arvanitakis, 2014; James et al., 2010; Krause, 2011; Lizzio & Wilson, 2005; Mezirow, 2003).

The development of new strategies and relationships for coping including time management skills and identifying sources of assistance become an integral part of B.Ed-P students' experience that lead to a transformation of their lifeworld. Planning a course of action to deal with those new experiences and being aware that there are staff at the university who can help are significant for students (Crosling et al., 2009; James et al., 2010; Krause, 2011).

Students new to the University-2 learning environment are confronted with being in an environment that consists of several thousand other students, lecturers and tutors, learning advisors, counsellors and social elements such as a student union, guild and recreational facilities. For B.Ed-P students adapting to the University-2 learning environment requires a reorganisation of time, financial responsibilities and family commitments to accommodate the time needed for study. Added to these prior commitments, B.Ed-P students need to understand the type of learning expected in lectures and tutorials, how to navigate online learning resources such as Blackboard and the assessment strategies of the units they are studying. Additionally, establishing relationships with university lecturers, tutors and support staff such as learning

advisors and counselling services is part of the university learning environment. Figure 3 provides a diagrammatic representation of the elements of this new learning environment.

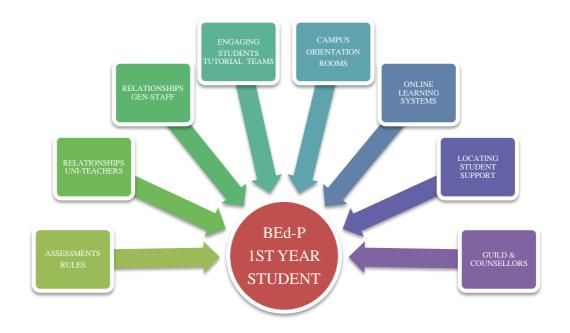


Figure 1.3. University 2 B.Ed-P Learning Environment

In such a multifaceted environment studying for B.Ed-P students involves more than simply taking 'on board' the requisite knowledge to pass examinations, write essays, work on team assignments and access learning materials (Crosling et al., 2009; Walker-Gibbs, 2008). In this environment social interaction becomes a key element in how well a B.Ed-P student identifies with being a university learner and how they go about accessing support not only from their tutors but also from learning advisors and counsellors. Research conducted over the past two decades (Benson et al., 2014; Cranton, 1995, 2002; Gravett & Petersen, 2002; James at al., 2010; McInnis, 2001; McInnis & James, 1995; Mezirow, 1991, 2003; O'Shea, 2011) found that students engage in tertiary study with rich and diverse life world experiences that make each students learning journey unique. It is this uniqueness of attitudes, values and expectations that results in a students' learning experience being one that is as much a social experience as it is an academic one.

Diversity of B.Ed-P learners

B.Ed-P students who undertake paid work of more than 16 hours per week are distinguishable as they are likely to be older than school leavers, from a remote area, be the first in their family to attend university and live in rental accommodation or own their own home (James et al., 2010). The financial impact of having to reduce paid hours is recognised (James et al., 2010; McKenzie & Schweitzer, 2001) as a significant stress for these students and a predictor of early withdrawal or failure. This group of students are more likely than others to work to meet basic needs, to provide financial support for their family or to repay financial loans (James et al., 2010; Hillman, 2005).

B.Ed-P students who are the first member in their family to attend university are deemed to come from families where members have no previous experience of studying in a higher education institution and/or have little knowledge about what first year study will be like (Crosling et al., 2009; James, et al., 2010). Students from this background are more likely to have a clear focus about their purpose for undertaking tertiary study, such as obtaining a more rewarding and better paying career and being able to work in a profession that allows them to make a contribution (James et al., 2010). They are also more likely to manage their academic workload strategically compared with other students. However, they are more likely to report that they are overwhelmed by the requirements of study and have difficulty meeting these requirements as well as existing whole of life responsibilities including family and financial commitments (Arvanitakis, 2014; James et al., 2010; O'Shea, 2011).

Lack of time management and prioritising skills required to effectively manage the course study load are common to school leavers, FIF and mature age students. Lack of skills in these areas result in students feeling under prepared and is a further indicator of at risk behaviour (Hillman, 2005; James et al., 2010; Lizzio & Wilson, 2005). Further demands on a student's time can be found in the need to socialise and adapt to the learning environment. Successful completion of first year study is dependent on there being opportunities for students to socialise with peers and share their experiences of university study and the impact it has on their lives (McKenzie & Schweitzer, 2001; O'Shea, 2011; Walck & Hensby, 2003).

The academic requirements of the University-2 course require students to understand how to navigate the Blackboard environment and access unit information, assessment policies, unit outlines and submission procedures. Students enrol in the University-2 School of Education with the goal of obtaining a career in primary teaching, however, while orientation to a specific goal, career path or profession may form the core reason for attending university the immediate problem facing new students is one of adapting to the environment in which learning will occur. The B.Ed-P learning environment includes the need to develop appropriate behaviours for working in small groups and completing group assignments, establishing connections with academic support staff and academic teaching staff, as well as developing relationships with other students. Additionally new students need to understand the role of the student guild, bookshops, auditoriums and other functions common in university life. Adjusting to new learning conditions requires B.Ed-P students to assess their existing attitudes and beliefs about education in the light of their new experience in the University-2 course. This contextual change is likely to place demands on a student's lifeworld, requiring he/she to undergo some form of transformation such as reassigning priorities as the role of being a university student is explored within a community of learning (Paavola, Lippone & Hakkarainen, 2004). The overwhelming need facing new B.Ed-P students is that of positioning themselves within the community of learning that consists of the University-2 environment and other B.Ed-P students (Brinkworth et al., 2009; Crisp et al., 2009; Northedge, 2003; O'Shea, 2011; Scutter et al., 2011; Walck & Hensby, 2003).

The process of learning as a first year undergraduate student, therefore, results not only in the acquisition of academic knowledge, but forces a developmental change in a student's lifeworld. In turn this developmental change may have consequential feedback on other aspects of their life including how they deal with family and financial commitments. Thus, changes in learning are likely to be linked through a cyclic process to include all aspects of a student's life (Mezirow, 1990, 1991, 2003).

Prior education

The level of prior education possessed by B.Ed-P students varies greatly. Mature age students typically enter university through the STAT or portfolio, however, many of

them have not attended formal study for many years (James et al., 2010). The diversity of students' prior educational experience and the level attained also presents a challenge for university teaching staff and course developers in that there is no baseline of prior education level attained that is consistent with the requirements for B.Ed-P students. Instead, School of Education academic staff members are faced with trying to develop an inclusive curriculum that adequately and equitably caters for students who present with a wide range of formal educational qualifications such as TAFE Certificate III or IV and Year 12, as well as those without any formal qualifications who have gained entry through portfolio or STAT assessments (Bradley et al., 2008; James et al., 2010; McInnis et al., 1995). This situation is illustrated with reference to the mathematical and numeracy components of TAFE Certificate III in community services. While mathematical concepts and ideas are present in the TAFE certificate program they are limited to time management, simple accounting and basic measurement. According to Hamlett, these concepts did not "provide a sound basis for the deep understanding required in primary mathematics teaching" (2010, p. 139). While this is only one example of the lack of literacies that TAFE Certificate courses provide for students using these qualifications to gain entry into first year education, it is a clear example of the problem facing teaching staff and course designers.

The Case for Transformational Learning

Mezirow (1978) developed transformational learning theory as a result of studying a cohort of American mature age students, in late 1978. It was this study that led Mezirow to define perspective transformation, a defining characteristic of transformational learning theory. Perspective transformation requires students to identify the uncritically assimilated values, typically acquired in childhood, that define and constrain their ability to interpret and make meaning from a new experience (Mezirow, 1990). The students enrolled in a course of study after many years away from any context of formal education. The study of this cohort was undertaken, as Mezirow believed that adult education theories of the time did not address the students' lifeworld and how the process of learning, in turn, transforms the students' lifeworld.

The significance of transformational learning theory for understanding the experience of B.Ed-P students in 2013 in Australia lies in the theory's acknowledgment that existing attitudes and values can constrain an individual's ability to develop an understanding of a new experience. Mezirow (1978, 1990, 1991,2000, 2003) uses the term, 'meaning perspective', to represent the attitudes, values and beliefs that constitute the lifeworld of an individual and further describes that an individual's meaning perspective constrains their ability to evaluate and construe meaning from new experiences.

For University-2 B.Ed-P students the need to understand the requirements of learning at a university and, therefore, to position themselves within these requirements represents a change in their prior attitudes and beliefs. Whether it is a school leaver fresh from a secondary learning environment or a mature age student returning to study, both are required to negotiate a new learning environment and through that process of negotiation reflect on prior values, attitudes and beliefs that shaped their expectations of higher learning.

Disorienting Dilemma

An individual's lifeworld includes many values and beliefs uncritically assimilated in childhood. It is not until an individual is confronted with an experience that they cannot make sense of, or derive meaning from, that they begin to question why the values they hold, they regard as being valid. Mezirow (1990, 1991) describes this event as a disorienting dilemma and is the first phase of the transformational learning process. Subsequent phases include critical self-reflection, withdrawal and reintegration (Cranton, 1995, 2002; Gravett, 2004; Mezirow, 1990, 1991; Northedge, 2003; Robertson, 1996; O'Shea, 2011). This process is discussed using the transformational learning model shown in the theoretical framework presented at the beginning of Chapter 3. The process results in the individual developing a more inclusive meaning perspective developed not from uncritically assimilated values, but from conscious critical self-reflection and social discourse (Habermas, 1984; Mezirow 1990, 1991, 1998, 2000, 2003) engaged in to derive meaning from a situation that was previously not able to be understood. The implications of transformation of one's meaning perspective for learning are that a more inclusive

meaning perspective leads to more effective problem posing and problem solving. This leads students to be better able to engage with problem solving and reflective thinking activities that characterise much of the university learning experience (Crosling et al., 2009; Paavola et al., 2004; Taylor, 2000).

The diversity of first year University-2 B.Ed-P cohorts represents a collective of attitudes values and beliefs that new students may have never encountered before undertaking first year study. Through the process of experiencing a disorienting dilemma and beginning to think critically about their reasons and values for being a B.Ed-P student they will better be able to solve the problems they have reported in this study of difficulty with comprehending and coping with the study material and managing and prioritising their time to effectively integrate study with other life commitments. For this reason transformational learning theory has been adopted to explore the relationship between the students' previous experiences and personal expectations, as well as their progress in their first year of the University-2 B.Ed-P course.

The current study evaluates, in part, the extent of the transformational learning occurring amongst a diverse University-2 B.Ed-P first year cohort. The study provides a reference point for critical reflection for proactive adjustments to the B.Ed-P course material, unit content and delivery modes. Importantly, the study offers an opportunity to interpret how first year B.Ed-P student expectations are orientated within a specific University-2 learning environment and how these expectations influence student retention and wellbeing, as well as the School of Education's organisational sustainability. Specifically, this study underscored both the diversity and complexity of the B.Ed-P student cohort, with first year students included from:

- first in family (FIF) participants in tertiary study
- non-English speaking backgrounds (NESB)
- culturally and linguistically diverse (CALD)
- single parents
- mature age students who have not participated in formal education for many years
- students who present with learning difficulties; as well as

• year twelve entrants from traditional end of year examinations

The Significance of the Study

The experience of studying at University-2 presents B.Ed-P students with new learning expectations and exposure to the culture of university life. Students who have not been exposed to a culture of learner-centred teaching may take time to understand how it impacts on their participation. Adaptation to a tertiary learning environment frequently results in students being confused about what they need to do to partake of the culture of adult learning and assimilate its meaning for them as learners (Arvanitakis, 2014; Brinkworth et al., 2009; Lizzio & Wilson, 2005, Northedge, 2003; Scutter et al., 2011).

The *Review of Australian Higher Education* (Bradley et al., 2008) recommends making higher education available to people from low socio-economic status (SES) backgrounds. SES is a measure of an individual's or family income, education and occupation. This recommendation of massification suggests that more students enrolling in Australian universities will have limited prior educational experiences. This cohort of students will engage in a learning process whilst orientating themselves in a new and challenging social environment. They will have to adjust particular preconceived personal expectations in order to accommodate an emerging understanding of a range of School of Education and University-2 expectations, within a finite support capacity associated with the teaching and learning environment. Transformational learning theory will, therefore, be an increasingly important lens through which to identify the learning strategies that may best support these students. It also has the potential to inform curriculum development and delivery needed to address the successful transition of first year B.Ed-P students into the School of Education learning and teaching environment.

The Purpose of the Study

The purpose of the study was to understand the B.Ed-P students' experience of first year study and their perceptions and experiences of academic support, as well as their personal wellbeing and sacrifice. The current study, by disclosing important recommendations for University-2 School of Education to improve the quality of the

first year experience of their students, also offers recommendations for improving retention and participation. The study will:

- 1. Describe the experience of Western Australian University 2 first year B.Ed-P students during their transition to university study.
- 2. Analyse the transformative stages of transition to the University 2 School of Education study for this group of B.Ed-P students.
- 3. Determine whether the model of transformative learning proposed by Mezirow (1990, 1991) provides an adequate explanation of the stages of adaptation associated with the learning experience of the first year B.Ed-P University 2 School of Education students.
- 4. Ask what implications can be drawn from the evidence on first year B.Ed -P students' experience at University-2 using Mezirow's model of transformative learning.

Summary

Student retention is a key concern for university management and staff with non-completion of first year study representing a loss to schools or faculties in terms of the cost of providing the resources to supply and deliver quality education. Understanding why students do not successfully complete their first year of study is important if effective changes that result in improved retention figures are to be realised. Massification of the tertiary sector of education has brought about an increase in the diversity of students commencing undergraduate study. Students are entering universities from diverse cultural, social and SES backgrounds. While this has implications for university management and staff as to how they can best provide for such a diverse student cohort, it equally has implications for how a diverse group of students go about coping with study materials and understanding their roles as learners. Here the concept of each individual student's lifeworld, the sum of their existing attitudes, values and beliefs, becomes important in understanding their experience of university study.

First year University-2 study provides an environment where B.Ed-P students are required to make adjustments to the values, attitudes and beliefs they hold about what being a first year commencing undergraduate student entails. Understanding that other

students share the process of transformation and that others are negotiating a similar change is also essential if they are to adapt to the new learning environment. It also provides opportunity to explore new roles, relationships and actions together with planning a course of action and acquiring knowledge and skills for implementing new plans.

The research supports the need to consider transformational learning as it may occur for students new to University-2 study. As adult education, tertiary study represents a new environment for learning to occur in with its own social and cultural values and expectations. Chapter Two will present a review of literature that addresses transformational learning, the landscape of Higher Education in Australia and examines recent studies in student experience.

Chapter Two - Review of the Literature

The review of the literature was conducted in three parts. Part A reviews transformational learning theory (Mezirow, 1978, 1991, 2000, 2003) in detail and its integration of personal development, the constraining nature of uncritically assimilated attitudes, values and, beliefs with the acquiring of problem posing and problem solving skills, which face adult learners. Part B explores Australia's Higher Education Landscape, The Tertiary Education Quality and Standards Association (TEQSA), the professional body responsible for maintaining teaching standards, and the impact of massification on university teaching and learning practise. Part B will also review the relevance of these standards to the need for Australia to be competitive in a global knowledge community as reported by the Organisation for Economic Cooperation and Development (OECD, 2010). Part C reviews recent studies in student experience, revealing the difficulties commencing undergraduates experienced in their transition to university study.

Part A: Transformational Learning Theory

Transformational learning (TL) is learning that occurs when an individual questions their existing values, attitudes and beliefs. Mezirow (1991) sees the goal of fostering transformative learning as,

...helping learners move from a simple awareness of their experiencing to an awareness of the conditions for their experiencing [how they are perceiving, thinking, judging, feeling, acting, a reflection on process] and beyond this to an awareness of the reasons why they experience as they do and to action based upon these insights (p. 197).

The incentive to question existing values comes from experiencing a situation about which sense cannot be made. Mezirow (1991) regards this as a disorienting dilemma that leads to a process of critical reflection and rational discourse followed by 'perspective transformation'. Perspective transformation is central to Mezirow's theory of transformational learning and represents development that is characterised

by the adoption of new values, attitudes and beliefs permitting a broader more inclusive interpretation of experience.

Transformational learning is an intensely personal experience and as such it is difficult to quantify the time period of critical reflection that follows a disorienting dilemma. While the period of time for critical reflection to occur is difficult to measure, it leads to the adoption of new values that make the new perspective more integrated and discerning (Benson et al., 2014; Mezirow, 1991; Northedge, 2003; Willis, 2007). During this stage an individual seeks consensual validation of their new beliefs through rational discourse. Acceptance that the new values are valid can represent perspective transformation or transformation of meaning schemes. Meaning schemes are the attitudes, values and beliefs an individual holds about a specific event or experience. Perspective transformation or the transformation of meaning schemes both constitute a transformational learning experience (Mezirow, 1990, 1991).

Dialogue that permits engagement in discourse is central to understanding one's own values and those of others. Dialogue in this sense differs from every day discourse in that it requires the participants to evaluate the authenticity of the attitudes, values and beliefs being expressed (Mezirow, 2003; Northedge, 2003; Taylor 2000, 2007).

Disorienting dilemma

The point at which a student becomes aware that their existing values are constraining their ability to understand, or make meaning from a new situation or experience, is for many, a time of confusion and doubt.

Mezirow (1991) defines a disorienting dilemma as one that cannot be made meaning of from the existing attitudes, values and beliefs, which form a component of a student's lifeworld. The students existing attitudes, values and beliefs constrain or limit their ability to develop understanding from a new experience. The experiences may include loss of a loved one, loss of a job or career, engaging with a new career direction or becoming a student. For first year students a disorienting dilemma may be experienced as they find their existing attitudes of study do not meet with their expectations of the university environment of student centred learning. These expectations require students to reflect on how their prior experience of learning,

based on TAFE and secondary school experience has shaped their anticipation of university study. Additionally, mature age students who have not attempted formal education for several years bring with them their earlier experiences of schooling as part of their lifeworld (Mezirow, 1991; Brinkworth et al., 2009; O'Shea, 2011; Willis, 2007). Hence it is reasonable to expect that many mature age students, may have attended earlier education during the years: for example 1940 to 1980 and may have experienced a more didactic form of teaching that required them to simply absorb the academic material delivered. This is an example of the banking system of education where the role of the student is to absorb information, graduate and then become a productive member of society (Freire, 1972). This approach to teaching and learning differs significantly from current student centred university teaching and learning practices (Arvanitakis, 2014; Crosling et al., 2009; Paavola et al., 2004; James et al., 2010; Krause, 2011; Walker-Gibbs, 2008). Engaging with student centred learning also represents a disorienting dilemma for these students as they adapt to a new learning environment. Where a student finds their existing assumptions do not allow them to solve a problem a disorienting feeling results when experiences do not meet with expectations. This experience represents a trigger event and is the first phase of transformational learning.

Trigger events may be abrupt and unpredictable in nature such as the death of a loved one or loss of a career or job (Mezirow, 1991; Taylor, 2007; Willis, 2007). There may also be an event or series of events that occur over time that cause an individual to question the validity of their existing values and beliefs (Brinkworth et al., 2009; O'Shea, 2011). For many students undertaking higher education represents a situation where their self-perception is challenged as they seek to integrate new values with pre-existing values (Crisp et al., 2009; Mezirow, 1991; O'Shea, 2011).

Critical reflection

The role of critical reflection is central to transformational learning theory (Mezirow, 1998). It is through critical reflection that a student can begin to understand the limitations of their own beliefs and knowledge. In understanding the limiting effect of existing uncritically assimilated attitudes, values and beliefs a student can become aware that their existing values are shaping the way they see a given experience and

therefore can constrain their efforts to develop understanding from the experience. This is evident when a student believes they cannot understand a certain experience and are therefore unable to begin to pose a solution to, or arrive at a course of action that will allow them to resolve the problem (Krause, 2011; Mezirow, 1998; O'Shea, 2011; Taylor, 2007; Willis, 2007).

Critical reflection of existing values, attitudes and beliefs allows a student to see that a solution to a problem may require them to shift or transform their own prior assumptions as a first step to arriving at a course of action that can lead them to a solution that is meaningful The prior assumptions that underpin a student's meaning perspective shape the lens through which they view and make meaning of any experience. When the meaning of an experience cannot be interpreted using existing assumptions the validity of those assumptions is questioned through critical reflection. Critical reflection on the validity of existing assumptions and the adoption of new values leads to the development of a more, integrative, inclusive and discerning meaning perspective (Cranton et al., 2012; Cranton, 2000; Gravett, 2004; Gravett et al., 2002; Mezirow 1991, 1998, 2000).

Meaning perspectives

Meaning perspectives represent the socially acquired values and attitudes embedded in routines that are sanctioned by cultural and social practice and expectations (Mezirow, 1990, 1991) in, for example, the role of the student is being seen as one of acquiring knowledge, the role of the teacher as one of providing that knowledge, the role of law enforcement as maintaining a safe society and the role of medical practitioners as making people healthy when they fall ill. These brief and context limited interpretations of the roles of others are arrived at when individuals do not question the validity of their existing values or their source. The limited role of the student described above does not acknowledge the need a student has to be part of a learning culture, to socialise with other learners and to identify themselves as a member of a community of learners (Crosling et al., 2009: James et al., 2010, Krause, 2011; Paavola et al., 2004; Robertson, 1996; Vivekananda &Shores, 1996).

The assumptions university students use to interpret events and make value judgments about them are formed from prior learning and their experiences of pre-university

education (Brinkworth et al., 2009; James et al., 2010; O'Shea, 2011). Much of the prior learning underpinning assumptions occurs uncritically during childhood. Adults adopt assumptions and presuppositions through a more rational process in order to make sense of the world around them by developing meaning perspectives which "... involve criteria for making value judgments and for our belief systems" (Mezirow, 1990, p. 3). Understanding of the limitations of previously held values affords students opportunities to examine and potentially integrate new values, assumptions and beliefs in first year study consistent with the integration of new meaning perspectives and meaning schemes. For university students the limitations of their prior values are positioned in their lack of understanding about the amount of time they will need to invest to succeed at their studies (James et al., 2010; Hillman. 2005; Lizzio & Wilson, 2005).

Perspective transformation

Known as the 'psychocritical' or rational approach to transformational learning (Merriam & Caffarella, 1991), Mezirow's theory is concerned with how adults make sense of life experiences through the process of perspective transformation. That the learning occurs within a lifeworld context also places the theory in a socio-cultural context where the validity of new frames of reference or meaning perspectives is assessed with a view to the community values that support it (Mezirow, 2000, 2003). Perspective transformation is the process of critically reflecting on habits of mind (attitudes, values and beliefs) and expectations that constrain perception and, therefore, limit the degree of understanding that can be developed from experience. The transformed perspective is one where knowledge has become more reliable permitting more informed choices to be made and meaningful action to be undertaken (Cranton, 2002; Gravett & Petersen, 2002; Mezirow, 1991, 1998, 2000, 2003).

Perspective transformation is defined as:

... 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 integrative perspective; and finally, making choices or otherwise acting upon these new understandings.

Finally, action can be planned and solutions implemented on the basis of these new meaning perspectives by reframing problems that may have previously been difficult or impossible to solve.

Meaning schemes

The way in which the meaning of a situation is construed is determined by a student's existing meaning scheme, which allows them to make sense of the experiences they perceive (Mezirow, 1991, 2000). The sense constructed of any particular situation represents a meaning scheme and consists of the specific knowledge and belief held about what a given experience conveys. The student's broader meaning perspective then is made up of many meaning schemes, each one consisting of the knowledge they believe to be accurate, or appropriate for the experience, based on their previous experiences and the values and attitudes they have uncritically assimilated. Transformational learning theory regards those transformations of meaning schemes also constitute transformational learning experiences (Mezirow, 1991). Meaning schemes represent the way in which particular experience is viewed and constitute specific elements of broader meaning perspectives. Meaning schemes result in new situations being interpreted from assimilated personal and cultural values and limit the extent to which an individual can critically reflect on the nature of experience. Mezirow contends, "Awareness involves recognition of how we have been influenced by our culture and biography to acquire these limitations in the first place" (1991, p. 19).

The meaning schemes that an individual holds about being a university student may include attitudes and beliefs that have been shaped by family experience or societal values (Arvanitakis, 2014; Brinkworth et al., 2009; Hillman, 2005; James et al., 2010; Lizzio & Wilson, 2005; Vivekananda & Shores, 1996). Since student meaning perspectives, meaning schemes and prior assumptions are adopted through unreflective personal or cultural assimilation from life experience they can be misleading and require the use of critical reflection and social discourse or dialogue to test their authenticity.

A distorted assumption or premise is one that leads the learner to view reality in a way that arbitrarily limits what is included, impedes differentiation, lacks permeability or openness to other ways of seeing, or does not facilitate an integration of experience

(Mezirow, 1991, p. 118).

B.Ed-P students typically reflect on their premise of what being a student requires (James et al., 2010). The time they need to spend in private study and the impact this has on their lifeworld is a cause for reflection and re-evaluation of the role of being a student. Any prior belief about being a student as requiring them to only attend classes is unsustainable (Andrews, 2005; Arvanitakis, 2014; Brinkworth, et al., 2009; Cranton& Carusetta, 2004; Crisp et al., 2009; Gravett, 2004; McKenzie & Schweitzer, 2001; O'Shea, 2011; Paavola et al., 2004).

Domains of learning

Rational focus is a distinguishing characteristic of Mezirow's (1991) theory of transformational learning (Merriam & Caffarella, 1991). Habermas (1984), however, describes the emancipatory domain of knowledge as one that is concerned with how an individual perceives themselves and their roles in society. The process of reflecting on one's self is seen as emancipatory in the sense that an individual may then understand the reasons for his or her problems. Emancipatory learning is learning that involves the use of self-reflection for problem solving in a social context. Habermas (1984) also describes communicative learning. Communicative learning requires an abstract representation of the world that allows individuals to understand and reach agreement on shared experiences and the impact upon them of life experiences: "Through this communicative practice they assure themselves at the same time of their common life relations, of an intersubjectively shared lifeworld" (Habermas, 1984, p. 13).

In a review of research into transformational learning, Taylor (2000) identified essential characteristics of promoting transformational learning and the types of practices that can be used in the classroom by adult educators to promote it. Three essential elements of transformational learning emerged from the review. The first of

these is the adult learners own experience, which is a starting point for the transformation process. An adult's prior experience forms the lens through which they interpret experience and assign meaning to that experience from existing assumptions. Existing assumptions are socially constructed and can, therefore, be deconstructed and acted upon as a process of developing new meaning (Taylor, 2000). The second element is critical reflection and it is an essential characteristic of adult learning. Prior experience provides the assumptions and beliefs that are reflected upon when new experience cannot be explained from previous experience. Critical reflection requires the learner to question the authenticity of their beliefs and assumptions (Taylor, 2000). The third element is rational discourse as it is through discourse that new ideas are validated. Discourse provides the medium through which transformational learning occurs. It is through discourse that prior experience and critical reflection come together to promote the emergence of new beliefs resulting in a new interpretation of experience (Taylor, 2000; Willis, 2007).

Distortions in meaning

Transformational learning, with its emphasis on reflective thinking, holds that any way of construing meaning without reflection may be regarded as an epistemic distortion (Mezirow, 1990, 1991, 1998). Epistemic distortions also occur due to reification where attitudes are held to be true by social interaction and cultural values, with no reflection as to the validity of these values. An individual, who believes that their prior knowledge presents them with the only way to derive meaning from an experience and therefore does not critically reflect upon the nature of that experience, but instead interprets it from existing meaning schemes, will see the solution to that problematic experience as having either a right or a wrong answer (Mezirow, 1990, 1991, 1998; O'Shea, 2011). This interpretation is distorted in that the individual's perception of knowledge as providing all the answers for all situations does not allow for construction of new meaning and new knowledge, through critical reflection on prior knowledge, "Epistemic distortions have to do with the nature and use of knowledge" (Mezirow, 1990, p. 15).

Socio-cultural distortions frequently arise from the belief that values based on power and social relationships, representing current social mores, are immutable (Mezirow,

1991). These beliefs lead the individual to adopt a reified view of the world (what has been must always be), and limit their ability to question the validity of long held cultural or social beliefs. A student may believe that because students have always been the recipients of knowledge, as promoted through cultural interpretation of what becoming a student involves, if they are to be a successful as a student then they must receive all the knowledge that their teachers provide for them. This belief is assimilated uncritically, and limits critical reflection and the ability of students to question why these values are valid (Hillman, 2005; Mezirow, 1991; Robertson, 1996). While education has developed from that very didactic view of the teaching learning relationship, students returning to study after many years absence are likely to bring with them their memories and values of education from an earlier time. If their expectation of being a student is as described then adapting to a student centred learning environment that characterises university study today will require them to reevaluate their own views of what being a student involves and how they can contribute to the learning experience. This further represents a disorienting dilemma (Freier, 1972; James et al., 2010; Hillman, 2005; Mezirow, 1991; Taylor, 2007; Willis, 2007).

Mezirow (1990) uses the term psychological premise distortions to describe the third type of distortion in meaning. These distortions are derived from the processes of the inner mind, those uncritically assimilated values and beliefs. Mezirow describes psychological premise distortions as "Psychological premise distortions produce ways of feeling and acting that cause us pain because they are inconsistent with our self-concept or sense of how we want to be as adults" (1990, p.138). These types of distortions represent artefacts of an earlier life, frequently associated with some childhood trauma. However when they are carried over into adulthood they serve only to constrain an individual's ability to make, or attempt to make, sense of a new experience. It is through premise reflection that an adult can begin to make sense of long held and limiting attitudes, values and beliefs. This particular approach has been used in psychotherapy however Mezirow contends that "...it is a natural form of transformative learning that often occurs in adult life, especially during major life transitions, without the intervention of either a therapist or an educator" (1990, p. 138).

The personal impact of the challenges of transformative learning has been the subject of much attention in the transformative learning literature. Mezirow believes "These challenges are painful; they often call into question deeply held personal values and threaten our very sense of self" (1991, p 168). It stands to reason that a mode of learning that reaches below the level of overt behaviours and propositional knowledge to the very well-springs of our identity - to the level of why we act and how we think - can only invite profound discomfort. However, such characterisations should not obscure the fact that in most cases the total process of transformative learning is regarded by learners as an essentially positive experience leading, as Mezirow (1991, p. 155) suggests, to a more "inclusive, differentiated, permeable, and integrated perspective...".

Existing presuppositions can be a source of anxiety when they are found to limit an individual's ability to make sense of an experience. This has a limiting effect on their ability to reflect on those presuppositions. Finding themselves in a position of uncertain knowledge and concepts they frequently choose to stay with what they know rather than enter uncertain territory where they believe their existing values do not allow them to pose or solve problems (Mezirow, 1990, 1991; O'Shea, 2011).

The source of these distortions is often the prohibitions placed on certain behaviours during childhood: never play with matches, always eat your food, and don't question what your parents say. These dictums may have value for developing children in teaching them basic lessons that allow them to survive; however, when these prohibitions are delivered with threats of violence or withdrawal of love, they can exist into adulthood and form blocks to learning and reflecting on new ways of seeing and acting within the world (Mezirow, 1991, 1998).

The Nature of Reflection

Three types of reflection (Cranton, 1995; Mezirow 1991) may be considered in terms of learning domains. Content, process and premise reflection occur in psychological, sociolinguistic and epistemic learning domains respectively, with premise reflection (Mezirow, 1991) being the only type that leads to perspective transformation. Taylor (2007) suggests that content, process and premise reflection need to be treated

differently as each type of reflection deals with different phases of Mezirow's (1991) phases of transformational learning.

Each type of reflection will be discussed in detail including examples of questions that could be asked to illustrate the connection between the type of reflection and the learning domain in which it occurs.

In a review of transformational learning research projects carried out between 1999 and 2005 Taylor (2007) contends that,

The present research continues to affirm Mezirow's conception of transformative learning, through its stability over time, its relationship to expanding the self and pursuit of autonomy, and the applicability for informing classroom practice (p. 187).

Content reflection finds application in instrumental learning where the best solution to a problem is made from selecting from a range of accepted truths (Taylor, 2007). The validity of those truths, however, is not questioned and, therefore, any solution arrived at that is less than optimal may be reviewed with reference to the same unquestionable truths. Instrumental learning cannot generate new knowledge and is the type of learning that lends itself to skills acquisition (Taylor, 2007).

Process reflection is a key decision making process in sociolinguistic learning with validity testing involving asking how existing socially accepted values have shaped the process of problem solving (Gravett, 2004; Taylor, 2007). Premise reflection, however, involves asking why existing attitudes and habits of expectation have constrained the ability to consider alternative solutions. Validity testing of new assumptions is arrived at through a process of consensual validation that informs new action.

Therefore, the problem (Taylor, 2007) that the three types of reflection are equally significant should be addressed through professional development or professional learning opportunities for university teacher scholars wishing to promote transformational learning in a classroom setting. Equally important is the need to review the teacher-learner role (Cranton, 1995, 2002; Cranton & Carusetta, 2004;

Cranton & Hoggan, 2012; Gravett, 2004; Mezirow, 1990; Robertson, 1996) in order to promote a caring, supportive and mutually respectful environment where the teacher is a facilitator of learning and not merely a disseminator of knowledge.

Content reflection

Content reflection in the psychological domain is reflection engaged in when an individual questions their perception of self. Content reflection is exemplified by asking what of a situation. What skills do I have? What is my professional image? What parts of my nature allow me to do this work? In the sociolinguistic domain content reflection questions are concerned with social norms. Questions reflected upon could include those relating to, the view of an issue held by parents and society during childhood and adolescence, the views represented in the media, or the views expressed by politicians. Whereas questions in the epistemic domain could include; what knowledge have I gained from past experience? What could have enabled me to learn this? What could have prevented me from learning this? (Cranton, 1995, 2002; Mezirow, 1991).

Process reflection

Process reflection occurs when learners ask how they have come to acquire specific knowledge. Psychological values can be questioned by asking how one's self-perception has been arrived at. *How did I come to choose this career? How is it that I came to value career activities more than family values?* Sociolinguistic schemes can be questioned by asking how social norms have been formed or how the community I grew up in influenced my views. Within the epistemic domain, process reflection is concerned with asking how I came to the conclusion that this theory is valid or how I developed criteria for assessing this (Cranton, 1995, 2000; Mezirow, 1991).

Premise reflection

Premise reflection involves questioning the reasons why beliefs are held. By its nature this type of question does not focus exclusively on one particular assumption or meaning scheme but impacts the broader perspective as a whole. In the psychological domain questions that can be asked include: why it is necessary to see my relationship

with my family that way or why my self-image as a learner is important to me. In the sociolinguistic perspective questions take the form of: why are these norms important? Or, why question that philosophical stance? In the epistemic perspective, questions could take the form of: why do I need that knowledge? Or, why do I need to read further on that issue? (Cranton, 1995, 2000; Mezirow, 1991).

Content, process and premise reflection are engaged in when a new experience is encountered that leads to a re-evaluation of existing values, attitudes and beliefs. The three phases of reflection may also be considered in terms of how individuals perceive themselves, their reason for their perception, and why they consider those perceptions as accurate or valid. Content reflection, then, is reflection on what an individual thinks, sees and acts upon in their day to day life (Cranton, 1995). When considered from this perspective, process reflection is reflection on the awareness of thoughts, feelings and actions and how they came to be. Premise reflection is characterised by reflection on the presuppositions that underpin an individual's knowledge and is concerned with the validity of that knowledge (Mezirow, 1991).

Instrumental and emancipatory learning

When questions are asked from an unfamiliar perspective, critical reflection may cause learners to examine the assumptions that underpin their existing views or beliefs. This may lead them to develop new views or beliefs in which case the critical questioning can serve to identify a new trigger event (Mezirow, 1991). "Emancipatory knowledge is knowledge gained through critical self-reflection as distinct from knowledge gained from our technical interest in the objective world or our practical interest in social relationships" (Mezirow, 1991, p. 87). Instrumental knowledge is that which allows us to manipulate and control the environment, to predict observable and social events, and to take appropriate actions while communicative knowledge is based on our need to understand each other through language (Brown et al., 1989; Freier, 1972; Habermas, 1984; Mezirow 1991). Emancipatory knowledge is knowledge that is generated through self-reflection, growth, development and freedom. As such, emancipatory learning is capable of generating new knowledge as learning in the emancipatory domain involves arriving

at a solution to a problem by questioning the validity of truth claims of existing values or actions.

Phases of Transformational Learning

As well as developing transformational learning theory, Mezirow (1991) developed 10 phases of transformational learning. It is important to understand that these are phases, not stages, and as a result, may occur in any order. Focussed exclusively on adult learning, these phases are not linked to any global stages of development an individual may experience, such as puberty.

Table 2.1

The 10 Phases of Transformational Learning

| Phase | Phase of transformational learning |
|--------|---------------------------------------------------------------------------------------------------------------------------------|
| Number | |
| 1 | A disorienting dilemma |
| 2 | Self-examination with feelings of guilt or shame |
| 3 | A critical assessment of epistemic, socio-cultural or psychological assumptions |
| 4 | Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change |
| 5 | Exploration of options for new roles, relationships and actions |
| 6 | Planning a course of action |
| 7 | Acquisition of knowledge and skills for implementing one's plans |
| 8 | Provisional trying of new roles |
| 9 | Building of competence and self-confidence in new roles and relationships |
| 10 | A reintegration into one's life on the basis of conditions dictated by one's new perspective. |

(Mezirow, 1991, p. 168)

Nor is it necessary for an adult learner to experience all 10 phases to experience a transformation of their attitudes, values and beliefs. These phases (Table 2.1) represent the process of transformational learning from disorienting dilemma to reintegration. An individual may not experience all of these phases and they will not necessarily

occur in the order listed. The nature of transformational learning is an intensely personal one where an individual is required to question the validity of their existing assumptions in order to undergo perspective transformation.

The current study has used six of the ten phases, to indentify B.Ed-P students' experiences of transformation. In this context the phases can be considered to represent students' meaning schemes. Transformational learning is considered to have occurred if an individual experiences a change in one or more of their meaning schemes (Mezirow, 1991).

Phases of learning according to other educators

There are similarities between the phases of Cranton (2002) and those of Mezirow (1991). Phase 1 of Cranton's (2002) model is recognition that what one always held to be true is challenged by a new experience and or what one hears or reads. It is not necessary to have an actual physical experience to undergo an activating event. It may also occur through ones' own quest for understanding by reading or be conveyed by the words of others, presenting the form of ideas not previously expressed or understood. Cranton (2002, p. 66) suggests the following seven phases as indicative of transformational learning:

Table 2.2

Seven Phases Indicative of Transformational Learning

| Phase Number | Phase |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | An activating event that typically exposes a discrepancy between what a person has always assumed to be true and what has just been experienced, heard or read. |
| 2 | Articulating assumptions, that is, recognising underlying assumptions |
| | that have been uncritically assimilated and are largely unconscious |
| 3 | Critical self-reflection that is, questioning and examining assumptions |
| | in terms of where they came from, the consequences of holding them |
| | and why they are important |
| 4 | Being open to alternative viewpoints |
| 5 | Engaging in discourse, where evidence is weighed, arguments |
| | assessed, alternative perspectives explored, and knowledge |
| | constructed by consensus |
| 6 | Revising assumptions and perspectives to make them more open and |
| | better justified |
| 7 | Acting on revisions, behaving, talking and thinking in a way that is |
| | congruent with transformed assumptions or perspectives |
| | (Cranton, 2002, p. 66) |

Phase 2 requires articulation, or the bringing into focus ideas that have been unconsciously adopted. The next two phases require critical reflection of underlying values, how they may have been obtained and the consequences of holding them which leads to a state of being open to new ideas and alternative viewpoints. Phase 5 emphasises the role of discourse as a vehicle for validating new points of view. Phase six requires reviewing existing values in light of ideas expressed through discourse to make them more informed and better justified. The final stage requires planning and carrying out of new actions based on newly formed ideas, belief and knowledge.

Gravett (2004) contends that the work of Cranton (2002) and Mezirow (2000) suggests that facets of transformational learning can be represented by eight phases. The first of these is a feeling of inconsistency among our own thoughts

and feelings and that previous views and approaches are inadequate. Phase two is a feeling of disequilibrium. This is an important phase as we are frequently not aware of how our previous values maybe inadequate until we experience a conflict between what is held to be right and what one actually experiences. This in turn leads to phase three, the articulation or identification of the elements of previous values that must be revised and then phase four, examining the source of previously held values and why they are important. Phase five involves reflective discourse where alternative view points are discussed and assessed followed by a revision Phase six of existing assumptions and perspectives to make them more discerning and justifiable.

Table 2.3

Phase of transformation according to Gravett

| Phase Number | Phase |
|--------------|-------------------------------------------------------|
| 1 | A triggering event (disorienting dilemma) that leads |
| | to an awareness of inconsistency amongst our |
| | thoughts, feelings and actions, or a realisation that |
| | previous views and approaches do not seem adequate |
| | any longer |
| 2 | A feeling of disequilibrium |
| 3 | A recognition and articulation of assumptions and |
| | presuppositions that are held largely unconsciously |
| 4 | A questioning and examining of assumptions and |
| | viewpoints, including where they came from, the |
| | consequences of holding them, and why they are |
| | important |
| 5 | An engagement in reflective and constructive |
| | discourse, which is a type of dialogue in which |
| | alternative viewpoints are discussed and assessed |
| 6 | A revision of assumptions and perspectives to make |
| | them more discriminating and justifiable |
| 7 | Action arising from revision |
| 8 | A building of competence and self-confidence in new |
| | roles and relationships |
| | (Grayett 2004 n.2 |

(Gravett, 2004, p. 261)

Phase seven requires adopting a new form of action based on the revision of previously held values. Phase eight involves building of confidence and competence through being actively engaged in a course of new action based on new values arising from the previous stages. Both of these alternative interpretations of Mezirow's (1978, 1991) phases of transformational learning suggest that there are different phases an individual may experience as a result of a transformational experience however there are common elements of feeling confused or distressed, an examination of why this is happening, followed by discourse or testing of new ideas and finally engaging in some form of action dictated by new attitudes, values or beliefs. The model presented by Gravett (2004) shows that discourse with others occurs later in the transformational process as a result of more time and effort being involved with understanding the nature of the trigger event. This is shown in phases two, three and four.

Making Meaning: Developing Understanding from Experience

Cultural values shape the way individuals learn during childhood are rewarded when they express a view that coincides with their parents. In broader society individuals are rewarded for having and expressing thoughts that convey values and norms, held by the culture in which they live, to be true or acceptable. Making meaning in transformational learning is involved with "becoming critically aware of one's own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation" (Mezirow, 2000, p. 4).

According to Brown, Collins and Duguid, "... knowledge is situated, being in part a product of the activity, context, and culture in which it is developed and used" (1989, p. 32). Learning to write from dictionary definitions and key sentence constructions produces writing that is typically free of contextual awareness. Words are selected on the basis of a dictionary definition, which does not place the meaning within the cultural context of the learning. The solution to the problem of which word to use is arrived at from a selection of definitions held to be true in isolation (Brown et al.,1989; Andrews, 2005).

In contrast, those who are familiar with the language and the culturally accepted values in which it is learnt, solve the problem of choosing the correct word with an awareness of the context in which it will be used. This process requires an understanding not only of strict definitions, but also of cultural values, where the meaning of a word is different depending on the context of how it will be used, to arrive at a solution (Brown et al., 1989).

Knowledge then can be seen as not an isolated group of facts or a specific set of skills; but is dependent on the context in which it is generated and acted upon. For many students, learning at university and how they assimilate knowledge in that context and within the culture of university life is learning of which they have no prior experience (James et al., 2010; Lizzio & Wilson, 2005; Andrews 2005) contends that knowing relates to the changes a person experiences on the basis of identifying the source and consequence of that knowing. Transformational learners experience a realignment of their values with information they perceive. In a learning environment the relationship is comprised not only of the topic being studied and an individual's perceptions of it, but equally important is the relationship between the teacher and all learners. This environment then is the context within which knowing may be achieved (Andrews, 2005).

An individual's identity is shaped by their interconnections with other individuals and culturally and socially accepted norms of thought and behaviour that guide their actions. An individual's identity is, therefore, not comprised of discreet elements of knowledge, but rather by the relationships that exist in shared lifeworld experiences (Andrews, 2005; Northedge, 2003; O'Shea, 2011). The understanding developed from these experiences represents learning that cannot be separated from the history, language and cultural values that shape an individual's existing assumptions and therefore their meaning perspective. "The process of self-empowerment, acquiring greater control of one's life as a liberated learner, is, of course, always limited by social, historical, and cultural conditions" (Mezirow, 2000, p. 27). Transformational learning is a process of liberation from uncritically assimilated values that limit an individual's ability to pose and solve problems.

Types of Learning

Instrumental learning

Facilitating transformational learning requires an understanding of the thought processes that occur during learning and the types of activities that are likely to encourage it. Instrumental learning is concerned with controlling the environment and improving performance. Truth claims are assessed as a means of determining that something is what it claims to be. "In instrumental learning, the developmental logic is hypothetical-deductive, and empirical methods are more often appropriate for research" (Mezirow, 2003, p. 59).

Communicative learning

Communicative learning involves understanding what others mean when they communicate with you. To understand someone requires becoming aware of their assumptions in order to make an assessment of their authenticity. Critical-dialectical discourse involves arriving at a best judgment based on the beliefs of others through analogic-abductive thinking. Abductive reasoning (Mezirow, 2003) moves from a concrete experience to abstract realisation. Transformational learning theory supports this distinction. The process of perspective transformation is arrived at through critical questioning of prior assumptions requiring assessment of their validity.

Experiential learning

Taylor (2000) contends that experiential learning activities can encourage transformational learning on the part of students. These activities have the potential to be more meaningful and hence relevant to student learning and include the relationship between student and teacher. Understanding of the learning experience involves a level of critical reflectivity when considering the world in which we live, work and learn. "Therefore, it becomes imperative in adulthood that we seek ways to understand better the world around us and in doing so develop a more critical worldview" (Taylor, 2000, p. 3).

Emancipatory learning

Emancipatory learning involves questioning of instrumental and communicative learning and occurs when an individual critically reflects on their own perceptions of knowledge and the role of social knowledge in forming opinions, attitudes and beliefs (Cranton & Hoggan in Taylor et al., 2012). Evaluation of a transformative learning experience (Mezirow, 1991, 2000; Taylor, 2012) involves observing a change in reflection on the part of learners and is, therefore, more concerned with the processes the learner is experiencing than the content they have acquired. Observing this change then requires different assessment strategies than are used in instrumental learning where the purpose of the learning is to acquire specific knowledge or skills that can be repeated or acted upon in a prescribed manner. Interviews, surveys, narratives, checklists and journals provide learners with the opportunity to demonstrate their reflective thinking as a process that they are experiencing as they negotiate a particular learning activity and can therefore be effective as assessment tasks. However, transformational learning cannot be taught: educators can only provide the conditions where transformation may occur, but cannot make it happen (Cranton & Hoggan in Taylor et al., 2012).

The student-teacher relationship must also be examined when attending to the dynamics of transformational learning. For transformational learning to occur, the power dynamic of the teacher being the all wise, all knowing disseminator of knowledge must be replaced with a more equitable one where the educator is seen and behaves as a facilitator of learning (Andrews, 2005; Hillman, 2005; Robertson, 1996).

Facilitated learning

Gravett and Petersen (2002) recognise the importance of the teacher-student role in learning. Their work in South Africa in developing a teaching methodology course that promotes transformational learning is founded in the understanding that old values, beliefs and attitudes need to be examined in the light of new experiences. Their work with students who have been practising as adult and higher educators and

nursing students who are studying to be nursing educators meant that most students were used to a didactic delivery mode of teaching where the teacher was the key figure who dispensed the knowledge and students were those who received or acquired that knowledge. The researchers' aim was to facilitate a learner centred dialogic style of teaching where educators and students share responsibility for the learning tasks, the reasoning, reflection and construction of knowledge. Promoting critical reflection on the part of students attempting to understand these new experiences requires the development of a caring and supporting environment where the teacher-student role is one of mutual respect. "Our teaching methodology course is underpinned by the notion that transforming existing ways of thinking and doing requires that learners come to [an] awareness that there is indeed a need for transformation" (Gravett & Petersen, 2002, p. 100).

Transformational Learning and Maslow's Hierarchy of Needs

Maslow (1943) synthesised a large volume of information related to human motivation. The results of his work are represented in his hierarchy of needs that depicts human needs as levels within a pyramid structure. The first four levels represent basic needs that all people need to achieve in order to live a healthy life. Achieving the next level requires that the previous level or levels must first be satisfied. These needs are represented by psychological, safety, belongingness and, loving and esteem needs. Maslow believed "All people in our society (with a few pathological exceptions) have a need or desire for a stable, firmly based, (usually) high evaluation of themselves, for self-respect, or self-esteem, and for the esteem of others" (1943, p. 382). Maslow asserted that:

Even if all these needs are satisfied, we may still often [if not always] expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man can be, he must be. This need we may call self-actualisation.

(1943, p. 381)

These may be considered in one sense as desires for strength in the face of life's challenges and the need for adequate independence and freedom. However, in another sense the individual may desire a professional reputation that earns them respect, recognition and appreciation from others. If these needs are met an individual may still experience a need to further improve his or her own abilities, a process of self-actualisation, and to find new challenges in becoming the best that they can be.

The transformational experience of first year students can be related to the growth needs of Maslow's 'Hierarchy of Needs'. The first of these needs, a need to know and understand, is reflected in the motivation they report for undertaking the course and indicates they have a need to know and explore the subject material that will ultimately allow them to achieve their goal of being a primary school teacher. The transformational learning (Mezirow, 1991) phases they experience in exploring options for new roles, relationships and actions and the provisional trying of new roles are consistent with a need to know, understand and explore.

Aesthetic needs can be seen when one considers that obtaining a degree and becoming a teacher will allow them to have a sense of order in their professional lives. The same can be said for self-actualisation, their need to find self-fulfilment and reach their potential. These needs are reflected in their interview responses where they report a personal need to achieve a degree and be the best they can be. The transformational phases they report are again those of exploring options for new roles, relationships and actions. Finally, the need for self-transcendence is reflected in their responses to interview questions where they report a desire to make a contribution and be a role model for others, by becoming a teacher.

Part B: Australia's Higher Educational Landscape

Australia is a large country with the majority of the population, 23 million, inhabiting the east and south east coastlines and a coastal area in the southwest

of the country in Western Australia. The capital city of Western Australia, Perth is 3,291 km from Sydney the capital city of New South Wales, on the east coast, making it the most isolated capital city in the world. By comparison the distance from Moscow to Madrid is 3,440 km. Figures from the 2011 Census (Australian Bureau of Statistics) showed Australia's population was 22,546,300. New South Wales had the highest population of any Australian state or territory with 7,287,600 representing 32.32% of the total population, while Western Australia's population was 2,331,500 representing 10.34 % of the total population. The lowest population for an Australian state was Tasmania with 510,200 representing 2.26% of the total population. The lowest populations by geographic area were the Australian Capital Territory with 363,800 or 1.61% of the total, and the Northern Territory with 229,200 or 1.01% of the total population of Australia. In the same year, 2011, New South Wales had 68,066 commencing undergraduates representing 0.93% of that state's population while Western Australia recorded 25,343 commencing undergraduates for a population of 2,410,600 giving a percentage of population commencing university as 1.08%. For Tasmania the figures revealed 4,171 commencing undergraduates for a percentage of population commencing university in that state as 0.81%.

In 1989 Australian universities began to enrol students from increasingly diverse areas of the community (Dobson, 2001) in a process known as 'massification'. The movement was driven by the recognition of underrepresented groups within society that had previously been denied access to higher education. In 1989 there were 441,000 students enrolled in Australian universities. This number rose to 672,000 in 1998, an increase of 52% over 1989 enrolment numbers. While enrolment restrictions were relaxed resulting in increased student numbers and the development of a student cohort whose composition better matched that of society at large, the issue of how increasing student numbers could be funded came to dominate university policy and procedures. Increasing student numbers continue to represent a major funding issue for all Australian universities (Dawkins, 2014; Group of Eight, 2011).

Crosling, Heagney and Thomas (2009) examined student retention from a teaching and learning standpoint and suggest there are multiple factors that

determine the level of student retention. These include the way in which universities promote their courses, admission procedures, teaching and learning practice, accessibility of student support services and assessment procedures, students personal life experiences, and financial concerns. While personal life experiences and financial circumstances are beyond the control of an institution: "The academic experience, and in particular the teaching, learning and assessment practices are within the control of teachers" (Crosling et al., 2009, p. 10).

Formative rather than summative assessment can provide more immediate feedback to students about their academic progress and contributes to student engagement with the curriculum. Commencing students frequently struggle with the transition from a structured secondary school environment to a student centred learning environment. Formative assessment can benefit new students by offering, "...an integrated and structured approach to equipping all students with the information and skills they need to make a successful transition into higher education and continue to succeed academically" (Crosling et al., 2009, p.14). However, the extent to which students can engage with the curriculum is dependent on their mode of study, part time or full time, where they live and family and financial commitments. These factors can restrict student's abilities to engage in extra curricula activities and limit the amount of socialisation and informal learning that can occur for students who live on campus or within travelling distance of the campus (Crosling et al., 2009).

Orientation is also an important part of the engagement process, however, Crosling et al. (2009) suggest that orientation should commence earlier and be of longer duration than the first week of semester. A virtual online orientation process could provide access to information including timetables, reading materials and location and contact details for disability support services, counsellors, library and, study spaces. This would offer students more time to understand the information provided and provide increased opportunities for new students to interact with teaching staff and current students. "Early engagement can benefit students by preparing them for their course,

demonstrating what will be expected of them, and assisting them to feel part of the institution" (Crosling et al., 2009, p.12).

Active learning involving small group problem solving based activities can also provide students with a sense of engagement with the student centred learning environment characteristic of universities. Student centred learning provides greater opportunities for interaction with other students and staff resulting in a more collaborative approach to learning that can foster a sense of belonging and community amongst students (Crosling et al., 2009).

With quality assurance and accountability policies and practices regulating universities in Australia and globally, student retention is one indicator of the effectiveness of institutions teaching and learning performance. Crosling et al. (2009) argue that statistical methods of measuring retention and attrition have a limited impact on improving the quality of education delivered. Instead the educational improvements required to increase retention and reduce attrition can be effected by improving teaching, learning and assessment practices to offer students greater opportunity to engage with their peers, teaching staff and the curriculum (Crosling et al., 2009).

Krause (2011) investigated factors affecting student engagement in first year undergraduate study. "It is a time of adjustment as students come to terms with the nature of university cultures, communities and conventions, whether they are online or in face-to-face campus environments" (Krause, 2011, p.200). During this time students frequently find themselves evaluating their identities as a result of being introduced to new ways of thinking and interacting with other students from diverse cultural backgrounds.

Engagement may be viewed as simply being measured by the time students spend on academic tasks or the time they spend discussing assignments, journal writing and other academic activities, however, this view ignores that for many students, university is just one engagement in an already busy lifestyle consisting of family, parenting and financial responsibilities (Krause, 2011). In the First Year Experience Questionnaire (James et al., 2010) responses to the comprehending and coping category revealed that students, who fell below the

mean value for this scale, were from low SES backgrounds, had English as a second or third language and acknowledged that having to undertake paid employment impacted their study. Students who were studying also scored below the mean value. Clearly, there is a need for universities to better understand the issues making engagement difficult for these students, as there is no adequate single solution to these problems as they present in the current climate of massification that characterises higher education. "Moreover, the emotional dimensions of engagement – the potential feeling of not belonging, not fitting in- are just as important as the behavioural indicators such as time spent on task" (Krause, 2011, p.203).

The approach of pre-enrolment engagement with students at home, school and community contexts (Krause, 2011) is similar to that of Crosling et al. (2009) where course information and other helpful information on the services the university can offer new students and techniques for effective university study can be delivered prior to enrolment. Students who have a sibling or parent who has attended university can receive valuable information from them about what to expect from the university learning environment. For those students who are the first in their family to attend university however, typically have to make do with university promotional material and on-campus information sessions. "Students need advice on such matters as employability options and how these might influence their study programme" (Krause, 2011, p.204), before they enrol so that they can make a more informed decision about the course of study they will undertake.

Krause (2011) argues for a whole of institution approach to student engagement and suggests that academic and professional staff should coordinate their efforts to make students aware of the services and sources of help available to them. This would also require effective timetabling to accommodate information sessions that can provide a coordinated and consistent response to student questions particularly in the first few weeks of study. "Apparently simple steps such as the sequencing of classes and timetabling of lectures, tutorials or laboratory sessions can have significant implications for the quality of the first year study experience" (Krause, 2011, p.206).

The design of first year curricula is also important for maximising student engagement and should include activities and assessments designed to scaffold students' development of effective study practices. Learning how to interpret assessment instructions, the use of referencing styles, the ability to give short presentations and demonstrate critical analysis skills are just some of the skills students will need if they are to successfully complete their first year of study. These skills will also benefit them for the duration of their course of study. Assessment is frequently misunderstood by new students as they can be uncertain exactly what is required of them. "Students are often uncertain about their level of skill development and whether or not they meet the required standard, hence the need for early low stakes assessment tasks that provide opportunities for feedback on their progress without the fear of failing the subject" (Krause, 2011, p. 207). It is also important for teachers to know as much as possible about their students before their first class or lecture, as this knowledge can be valuable in providing activities, assessment tasks, and quizzes that can engage a culturally and linguistically diverse student body.

Zepke (2014) argues that current research into engagement and retention does not take into account the many other factors, other than teaching and learning practice, that impact student's abilities to adapt to the culture and community of university study. These include a student's own beliefs and attitudes; their cultural background; social values; expectations of what university life will be like, and level of spoken and written English. The lack of research into a holistic consideration of engagement and retention is at odds with an academic orthodoxy that promotes critique of issues as a core academic pursuit. "Indeed, the effects of specific cultural, power and other contextual differences seem imperfectly recognised in engagement research" (Zepke, 2014, p.701).

Student learning is at the heart of engagement and retention research with institutions typically focussing on what they have control over and what lies beyond their control. Unfortunately this leads to a very narrow interpretation of institutional control which typically places teachers, their style of teaching and the form of assessments they use in a position of responsibility, for how successfully they engage their students, guided by curriculum and pedagogical

practices. "But the meaning of success tends to be connected to completion of programmes and paid jobs rather than to more personal and perhaps socially and politically less acceptable goals" (Zepke, 2014, p.701).

Zepke (2014) regards neoliberalism as the dominant philosophy driving universities today which has resulted in a shift between the ways universities used to operate compared to how they operate today; driven to be competitive in a global knowledge market. Neoliberalism has implications for how knowledge is viewed and what it means to be knowledgeable, since neoliberalism regards education as a commodity designed to improve performance and accountability. "Previously knowledge was generated within academic disciplines and research traditions associated with a search for truth based on reason" (Zepke, 2014, p.702). However, the adoption of neoliberalism is not restricted to its effects on staff and university operation. "Neoliberalism transformed this to a knowledge that is judged more on how it performs in a context of application – in this case the market place" (Zepke, 2014, p.702).

While neoliberalist philosophy continues to exist as a major philosophical underpinning of higher education it is unlikely that any changes will be made to engagement and retention research to include the many factors impacting student adaptability, to the student centred nature of university study. The most notable exception to this is the FYEQ (James et al., 2010), which identifies the complex and often overlapping elements including student identity, comprehending and coping with the academic workload, the need to undertake paid employment and deal with existing financial and parenting commitments that constitute the lifeworlds of commencing first year undergraduates. With its emphasis on performance and accountability neo liberalism, "... ensures that engagement gains political traction, particularly as an assurer of educational quality" (Zepke, 2014, p.700).

Creativity, knowledge and learning

The changes in the way universities have operated over the past two decades, and the changes that will occur in the future, have been, and will continue to be, driven by available institutional financial resources and technological

change, in order to maintain a competitive position in the global knowledge economy (OECD, 2010). To ensure an ongoing, competitive and, economically viable position in this economy will impact academic learning, teaching and assessment practice. "Contemporary economic and social contexts coupled with competing perspectives on 'the future' place significant demands upon educators and educational institutions" (Walker-Gibbs, 2008, p. 5).

Knowledge is linked to how we perceive ourselves and the world around us, which in the current global context supports the need for lifelong autonomous learners who can adapt quickly to economic and social changes. Universities have had to adapt their curricula and teaching and learning practice to provide the skills and knowledge graduates will need to function effectively in this new environment. Knowledge, therefore, has become commoditised or linked to creating profit and gaining a competitive advantage thereby making knowledge the new currency in the global knowledge marketplace (Walker-Gibbs, 2008).

Creative thinking has also become important in that it provides an economic incentive to create new products. In this regard intellectual endeavour creates intellectual value. "Value in this sense is linked to enhancing the economy rather than the aesthetics or social value which would be more traditionally associated with creativity" (Walker-Gibbs, 2008, p.6). Global competitiveness is also driven by creativity industries since these industries can link with social and economic change and produce commodities that are relevant to both the changing nature of society, and, consequently, the changing demands of consumers. "Creative industries therefore join the two separate entities of creativity and industry in order to develop innovative and entrepreneurial practices for the creative professional" (Walker-Gibbs, 2008, p.7).

The increasing value placed on creativity changes the nature of the global market economy to one where creative advantage can mean the difference between the success and failure of any business endeavour. Those who can create benefits on a financial scale from intangible knowledge are best equipped to succeed in this evolving market place. Critical thinking individuals are now required to create something that has market value. "Critical and

creative thinking are the two sides of the new currency' (Walker-Gibbs, 2008, p.7).

Creative industries have required universities to rethink the value of academic knowledge and the way they do business. Universities are being forced to operate under a demand driven business model and operate more closely with industry. The treating of knowledge as a commodity for sale (Zepke, 2014) has led to one of the largest issues now facing higher education: "One of the biggest challenges that face the higher education sector with regards to engaging with creativity and knowledge as commodities is how academic knowledge is conceived and managed" (Walker-Gibbs, 2008, p.8).

Walker-Gibbs (2008) proposes that a transdiciplinary approach can be used to facilitate the changes required on the part of academics to effectively negotiate the building of better networks with industry and realising that within one's own discipline there are multiple levels. Academics that have traditionally operated within rigidly defined environments will be required to work with people in industry who have traditionally operated from a range of business models. This process will require authentic dialogue to arrive at a standardised form of communication with all stake holders. "The dialogue among university management, individual academics, industry, community and the student body needs to be systematic and structured to ensure that all voices are heard and opportunities sought" (Walker-Gibbs, 2008, p.10). There will also need to be a degree of risk taking as people step out of their comfort zones, which while having the potential to create anxiety, will eventually lead to a new and more cooperative arrangement both within higher education and the way higher education interacts with industry, and the types of knowledge and skills that will become necessary to be competitive in a creative global economy into the 21st century (Walker-Gibbs, 2008).

Devlin et al. (2009) contend that engaging and motivating students is an increasingly complex task and has many drivers, not the least of which is universities that have to supplement their income due to ever reducing levels of Commonwealth funding. This is occurring in an environment where accountability of how universities spend public money is scrutinised more

closely by governments and students themselves who view quality education as essential in a market driven environment. Indicators of teacher performance, as an indicator of student engagement, need to be assessed by more than just quantitative methods. While quantitative analysis is relatively easy to perform and data can be gathered and collated quickly, it makes no allowance for the multifaceted reasons underpinning student engagement and hence retention.

A federal government initiative that used a set of indicators to assess the quality of teaching and learning at university developed the Learning and Teaching Performance Fund. The extent to which any given university would receive additional funding was based on these indicators. However, since these indicators were founded on limited already available data they have been criticised as not providing universities who wish to contextualise their teaching and learning practice with adequate data (Devlin, et al., 2009). Universities are assessed on the following student outcomes and output indicators:

- Progress Rate
- Retention Rate
- Graduate full-employment
- Graduate part or full-time further study
- Graduate satisfaction with generic skills obtained
- Graduate satisfaction with the quality of teaching received
- Graduate overall satisfaction

Equally, these seven indicators make no allowance for teaching styles that are dependent on the institution itself. "A current national project on teaching quality has, as its central principle, the concept that teaching quality is contextual and will mean different things, depending on the institutional environment in which it is being discussed and examined" (Devlin et al., 2009, p.110). The Teaching Quality Indicators (TQI) project acknowledges that as a multifaceted activity, teaching quality will be influenced by institutional priorities. It will provide a systematic framework for measuring quality of teaching and of teachers at institutional and individual levels. "It is argued that

indicators thus determined will be employed more usefully by universities and, subsequently, are most likely to promote an enhanced teaching and learning environment that ultimately benefits students" (Devlin et al., 2009).

Unfortunately, due to instability in the sector and a reduced funding base (Webb, 2009) the project, initially to have four stages, did not proceed beyond stage two. However, the second stage involved eight universities in Australia acting as pilot universities to trial and refine the projects findings. The evaluation of reports at the completion of stage two by all participating leaders at the pilot universities did reveal several benefits attained. "In general, they reported having found out a great deal more about their own practices, highlighting pockets of excellence that may otherwise have stayed hidden, and discerning where to put their efforts for improvement" (Webb, 2009, p.4).

The project has also been responsible for many high quality publications that demonstrated Australia's commitment to provide a high quality teaching and learning environment. "Of all the outcomes reported both by the pilot and the national project teams, perhaps the most palpable and persistent is the high degree of engagement that has resulted, providing evidence of a significant heightening of cultural awareness about teaching quality and its measurement" (Webb, 2009).

The role of creativity and the adequate resourcing of it in Australia's education system is also acknowledged by Walker-Gibbs (2008) where she likens creative thinking and critical thinking as two sides of a coin necessary if graduates are to enter the workforce ready to engage in a global knowledge community (OECD, 2010).

McKenna (2012) believes that agreement on the shape of the Arts Curriculum requires further consultation with other practising Academic Arts

Professionals. In particular, the role of the Arts as an interdisciplinary endeavour and as a philosophy of education was discussed. The Arts represent a creative process that can benefit all members of society by providing them with the opportunity to craft and model some aspect of their own lives. "It is this very capacity to craft spaces, places and time through artefacts that drives

the creative exchange and builds community both in the school and across the wider society" (McKenna, 2012, p.15). The success of graduating with a Bachelor level qualification is affected by the curriculum for any given discipline of study. Changes in curricula requirements during the students' course of study can have negative effects on how they perceive themselves as learners and members of a community of knowledge (Krause, 2011; Paavola et al., 2004).

Student Enrolments in Undergraduate Degree Courses

The total number of students enrolled with higher education providers in 2011 was 1,066,987. Of these, 74.6% were domestic students, an increase of 3.3% over the first half of 2010. The total number of commencing students in the same period was 361,958, an increase of 1.1% over the first half of 2010. Of the 25,343 commencing undergraduates at Western Australian universities 2,854 were enrolled in education undergraduate degrees (Department of Industry, Innovation, Science, Research & Tertiary Education, 2011). This represents 11.26% of the total commencing undergraduates. The figures for New South Wales show that of the total number of commencing undergraduates in that state, 7,787 or 11.44%, enrolled in education undergraduate degrees (DIIRSTE, 2011).

Low SES postcodes are calculated using the Socio Economic Indexes for Areas (SEIFA) available from the Australian Bureau of Statistics (ABS). SEIFA provides measurement of various socio-economic conditions according to geographic area based on information obtained from the Census. "It has a number of applications, including research into the relationship between socio-economic disadvantage and various health and educational outcomes, determining areas that require funding and services, and identifying new business opportunities" (ABS, 2012). Using this measure, the lower quartile, 25%, of all Australian postcodes was classified as low SES standing. This low SES by postcode measure was adopted by universities for reporting on percentages of students enrolled from low SES areas (Phillimore & Koshy, 2010).

The proportion of low SES students (Phillimore & Koshy, 2010) enrolled in Australian universities has remained at about 16% over the past two decades. Since low SES areas make up 25% of Australia's population it is likely that low SES students are missing out on the opportunity of a university education and are therefore, educationally disadvantaged. The target of 20% participation rate (Bradley, et al., 2008) from low SES backgrounds is problematic when consideration is given to the uneven distribution of low SES postcodes per state and territory. Tasmania, South Australia and Queensland are in excess of or close to the target 20% value; however, these states have higher percentages of low SES populations than New South Wales, Northern Territory, Victoria and Western Australia. Western Australia has 19.8% of the total low SES population in Australia (ABS, 2012) and a low SES enrolment rate of 11.2%, which is less than the Australia wide figure.

These figures highlight the difficulties some universities face in meeting the Bradley et al. (2008) targets in comparison to others where there is a greater proportion of low SES postcodes. Comparison with Tasmania's figure of 51.4% of low SES population and low SES enrolments of 31.3% highlights this difficulty (Phillimore & Koshy, 2010). While it is unclear how universities are expected to meet the 20% target, it is clear that there will need to be increased access rates for some universities if the target value of enrolments is to be reached. "This will require access rates of greater than 20% between now and 2020, given the current participation rate of approximately 16%" (Phillimore & Koshy, 2010, p. 3). However, given the geographic nature of postcode distribution, it is clear that some universities are exceeding the target figure already while others that operate in areas where there are reduced numbers of low SES postcodes are below the target value. There is a need for specific strategies that universities can adopt that are relevant to their geographic location and recognise the difference in work required on the part of institutions to reach those target values. In 2011, the Australian government set individual targets for universities to meet for low SES enrolments. These targets were based on a new combined low SES indicator that were based on low SES Census collection districts comprised of approximately 500 people and the number of recipients on Centrelink student support payments or Youth Allowance. The new indicator

reflected the multidimensional nature of SES standing (DIIRSTE, 2012). The targets set by Bradley et al. (2008) are still in existence at the time of writing this literature review, 2014.

The Final Report of the Higher Education Base Funding Review (2011) showed that the Commonwealth Government provides approximately 32% of the funding required by Australian universities. The universities themselves are responsible for allocating this funding across teaching, scholarship and base research, and accommodating the cost of programs to support students from low SES backgrounds places further strains on university budgets already operating in a competitive environment. A report by the Group of Eight universities claimed that shortfalls in base funding of up to 30% (Group of Eight, 2011) severely impact universities' abilities to maintain existing programs and implement new teaching approaches better aligned with the needs of a diverse student body. The level of base funding has fallen since 2003 levels, resulting in student staff ratios as high as one staff member per 30 students due to funding shortfalls (Group of Eight, 2011).

In 2014, in an address to the Mitchell Institute, Dawkins (2014) raises concerns about the proposed new funding schemes announced by the Abbott Liberal Commonwealth Government. While acknowledging the role of Vocational Education and Training (VET) as a contributing factor to preparing Australians to be competitive in a knowledge community (OECD, 2012), Dawkins suggests that universities need to move toward a more integrated approach to delivering higher education. This would include ease of access to university courses for people with VET qualifications. While such a move would mean a restructure for universities, of greater concern is the affect this may have on people from underrepresented backgrounds.

With new funding schemes in place universities are being encouraged to adopt a demand centred approach with potentially serious effects on equity. "In my judgement this is the biggest question mark against these reforms" (Dawkins, 2014, p. 13). The immediate concern is how universities will then structure their student fees and the sort of financial assistance available for students. If students from low socio-economic backgrounds are unable to gain a place at

university due to increased fees or be forced into courses that deliver a lower quality of education, then an inequitable situation will exist that restricts the full use of human capital. "It is clear that the burden on students will rise significantly and with interest being charged from the time the student commences, significantly higher levels of debt will accumulate" (Dawkins, 2014, p. 13). In the past, repayment of student loans was contingent upon the student entering paid employment at the completion of their study. Under the new proposals students will face greater difficulty in obtaining loans and this may prevent or discourage them from undertaking tertiary study. "This is most likely amongst students from low socio-economic backgrounds for whom greater risk aversion about debt accumulation can be expected" (Dawkins, 2014, p.13)

Maintaining Professional Teaching Standards

The Ministerial Council on Education, Employment, Training and Youth Affairs produced the Melbourne Declaration on Educational Goals for Young Australians (2008). The 'Melbourne Report' acknowledges the role of education in providing young Australians with access to an education system that allows them to reach their full potential and be able to compete in the global economy. "In the 21st century Australia's capacity to provide a high quality life for all will depend on the ability to compete in the global economy on knowledge and innovation" (Melbourne Report, 2008, p. 4). Globalisation and technological change are increasing the demands for a high quality education system that will prepare young Australian's with the skills and knowledge to compete successfully in the world forum. A key responsibility of Australia's educational policy is not just restricted to completion of secondary school. If Australia is to be competitive in a knowledge based global economy the education system must also promote and make higher education accessible to all Australians.

To maximise their opportunities for healthy, productive and rewarding futures, Australia's young people must be encouraged not only to complete secondary education, but also to proceed into further education and training

(Melbourne Report, 2008, p. 4).

While the Australian education system performs well against that of other Organisations for Economic and Cooperative Development (OECD) countries (OECD, 2012), there is a need to increase the participation of Indigenous Australians and improve the representation of underrepresented groups including those from identified low SES areas, rural and remote communities, those who have had a disadvantaged social or educational background and women seeking entry into previously male dominated courses. In addition to providing instruction in the knowledge and skills necessary for effective competition in a global knowledge based economy it is also necessary to foster the development of the principles of democracy, social justice and personal values of honesty and respect for all people (Melbourne Report, 2008).

In order to achieve these goals, the Melbourne Report (2008) identifies two key goals that form the focus of Australian education. The first goal is that Australian education should promote equity and excellence. This requires all Australian governments and all school sectors to provide access to education that is free from all forms of discrimination while ensuring that local cultural customs of indigenous Australians are acknowledged and contribute to the foundation of schooling practice and policy. Additionally, the goal also requires that socio-economic considerations do not impact academic performance and that school policy contributes to a cohesive society where social inclusion and tolerance for diverse religious and cultural views become the norm. Finally, by providing challenging and stimulating learning activities students will be encouraged to explore their own talents and abilities. The second goal is that all Australians become successful learners, confident and creative individuals and be active and informed citizens.

Principle to achieving those goals (Melbourne Report, 2008) is that students are encouraged to become actively involved with their own education; to have essential literacy, numeracy and information technology skills; and to be able to think deeply about and evaluate evidence logically and critically. Furthermore, developing students' creativity and resourcefulness enables them to effectively pose and solve problems in a wide range of disciplines and encourages them to continue with higher education once they complete secondary school. Fostering the development of

confident and creative individuals will ensure that students have, "the confidence and capability to pursue university or post-secondary vocational qualifications leading to rewarding and productive employment" (Melbourne Report, 2008, p. 9). In becoming active and informed citizens, Australians will, "...appreciate cultural, social, linguistic and religious diversity and have an understanding of Australia's system of government, history and culture" (Melbourne Report, 2008, p. 9). For these goals to be realised, it is essential that teachers be provided professional development opportunities to enable them to improve existing, and develop new skills that will allow them to model and foster improved social cohesion, improved participation of socio-economic disadvantaged groups and provision of learning activities that allow students to maximise their own unique learning skills and abilities.

Governments and schools have a responsibility to support student transition from secondary school to higher education or employment by ensuring students possess the necessary skills and abilities that will allow them to pursue further education or obtain meaningful employment. This requires schools to provide students with multiple pathways to pursue university or other post-secondary education and training which, "... requires effective partnerships with other education and training providers, employers and communities" (Melbourne Report, 2008, p. 12). School leaders also have a key role to play in maintaining and improving the quality of Australia's education system by supporting teachers to improve the ways in which they facilitate learning and promoting a culture of excellence in teaching and learning practice. Development of high quality teaching, high quality school leadership and enhancement of pre-service teacher education requires all Australian governments and schools to work together if the goals of the Melbourne Report (2008) are to be achieved.

This requirement is consistent with the level of teaching practice identified in the Melbourne Report (2008) if Australian education is to provide its citizens with the skills, knowledge and abilities to allow Australia to be an effective competitor in a global economy. The role of the teacher then extends beyond the classroom to being one that encourages lifelong learning, social justice and respect for all people.

The Tertiary Institutions Service Centre (TISC) is an incorporated body established in 1975 by Curtin University, Murdoch University and the University of Western

Australia with Edith Cowan University joining at a later date. TISC provides processing of applications for undergraduate study. It is also responsible for conducting the STAT entry tests and administration of the Western Australian Universities Preparatory Program both of which provide alternative entry pathways into undergraduate study. The majority of new university students are selected on the basis of their Year 12 secondary school results. The Australian Tertiary Admission Rank (ATAR) is calculated using Year 12 school subject results, which are summed and then weighted to reflect the performance of the current year cohort. The maximum value of an ATAR is 99.95. Universities set a minimum ATAR figure for new enrolments, this figure being dependent on available places and applicant performance.

TISC also maintains extensive records and provides detailed analysis of the ATAR scores. School leavers, those students aged up to the age of 20 years at the time of enrolment, are required to achieve a minimum ATAR score in order to be offered a place in a university undergraduate degree. In 2003, the ATAR required for entry to the B.Ed-P course was 74.00, while in 2008 the ATAR required for entry had dropped to 65.00 where it has remained in 2014. Together with increasing entry through non-traditional pathways, such as STAT and portfolio, the reduction in ATAR values suggests that, in order to meet the Bradley et al. (2008) recommendations for increased representation of underrepresented groups, the University-2 B.Ed-P course of study has reduced the entry standard for B.Ed-P students. This suggests that academic staff members are required to develop improved teaching practices for preservice teachers (Melbourne Report, 2008).

The First Year Experience

A target proposal (Bradley, et al., 2008) for 40% of Australians aged 25-34 years to have at least a bachelor qualification by 2025 was agreed on by the then Australian Commonwealth government. Achieving this target will require increased participation in higher education from underrepresented groups, "...in particular those disadvantaged by the circumstances of their birth: Indigenous people, people with low socioeconomic status, and those from regional and remote areas" (Bradley et al., 2008, p. xi).

Transformative learning theory can provide educators (Willis, 2007) with opportunities to develop reflective curricula material and pedagogical practice that can foster the development of new attitudes, values and beliefs that may allow learners to engage with challenges to their existing meaning perspectives (Mezirow, 1991). Reflective writing practice, including journal writing, can provide learners with opportunities to review their existing assumptions and develop new interpretations.

Educators promoting critical transformative learning can outline a reflective curriculum where community members are invited to confront challenges to the integrity and inclusivity of their community and/or group in order to safeguard its social capital under challenge from internal or external forces

(Willis, 2007, p. 364).

An example of an internal force is the resistance of a suppressed minority within a society to continue living as an oppressed subclass that has been enforced by their financial and social standing, while external forces are represented by the struggle for equality of women (Willis, 2007).

The term "perspective transformation" (Mezirow, 1991, p.167; Willis, 2007) refers to a transforming of an existing meaning perspective arrived at through a process of critically reflecting on an individual's assumptions and how they have come to constrain their view of the world, and then changing these habits of expectation to arrive at a more discerning and integrative perspective that informs future action (Brinkworth et al., 2009; Northedge, 2003; Mezirow,1991, 1998, 2003; O'Shea, 2011). "Fostering social capital through critical transformative pedagogy seeks to protect a democratic community's foundational ideals and practices so that members can learn to free themselves from acts or dispositions which condone or actually promote injustice and exclusion" (Willis, 2007, p. 365).

Ranges of student age

The age groups of commencing students in 2011 show that of the mature age entrants, the majority came from the age range 30-39 years (DIIRSTE, 2011). The majority of entrants into bachelor level courses were 18 year olds, with this group representing

24% of total first year enrolments. Australia's population is ageing, as are those of most developed countries as a result of reduced fertility and increased life expectancy (ABS, 2012). The median age of the Australian population was 37.1 years at 30th June 2011, an increase of 4.7 years since 30th June 1991. At 30th June 2011, Tasmania had the greatest median age of any Australian State with 40.2 years. The second oldest median age was South Australia with a median age of 39.4 years, followed by New South Wales (37.4 years), Victoria (37.1 years), Queensland (36.4 years), Western Australia (36.2 years), the Australian Capital Territory (34.7 years) and the Northern Territory (31.5 years) (ABS, 2012).

The number of people in the working age range, 15-64 years, represented 67.4% of the total population in 2011 (ABS 2012). The increasing age of Australia's population results in more mature age entrants commencing higher education. The total number of mature age entrants in 2011 was 108,511 with this cohort representing 38% of total enrolments. Entrants in the 30-39 years of age bracket accounted for 16.6% of mature entrants (ABS, 2012). This age range is consistent with median age range of the Australian population. The majority of the Australian population, 14.7 million, resides in capital cities with Perth showing the greatest increase in population over the decade 2001 to 2011, increasing by 26% (ABS, 2012).

Intergenerational mobility

From an economic perspective, social mobility is a measure of the ability of an individual to move up or down the wage scale compared to their parents and is closely related to educational achievement. A study conducted by the OECD into the effect of policy making on social mobility and the equality of opportunities for employment and education across generations found France, southern European countries, the United States and the United Kingdom exhibited low levels of mobility. In contrast Australia, Canada and Nordic countries showed higher levels of social mobility: "Intergenerational social mobility refers to the relationship between socio-economic status of parents and the status their children will attain as adults" (OECD, 2010, p. 4). The degree to which a society is considered mobile is related to the connection between parents' social status and the social status attained by their children, as they

become adults. In a society that has limited social mobility the social status, employment opportunities and educational opportunities for children are closely related to the achievements and opportunities that were available to their parents. This lack of mobility limits the opportunities for education and employment that would permit individuals to move between social strata compared to remaining at the same social status as their parents. Policies can have a strong influence on social mobility (OECD, 2010).

Typical examples are policies that shape access to human capital formation, such as public support for early childhood, primary, secondary and tertiary education, as well as redistributive polices [e.g., tax and transfer schemes] that may reduce or raise financial and other barriers to accessing higher education.

(OECD, 2010, p. 4).

The study also found that, across all OECD countries, persistence in secondary education achievement translates to tertiary education achievement. Children from families where one parent has a tertiary qualification are more likely to achieve a tertiary qualification themselves compared to those parents whose only formal level of education is secondary school. Improved access to education for individuals from underrepresented groups leads to improvement in wage mobility and may contribute to economic growth, which in turn could facilitate the development of policies that could reduce financial barriers to higher education.

Increasing the numbers of enrolled students from underrepresented groups brings with it a responsibility for supporting these students in an equitable manner if they are to succeed in their first year studies. In a keynote address delivered to the 12th Pacific Rim first year in higher education conference, Gale (2009) presented the case that traditional methods of determining which members of the community are deemed as underrepresented depend heavily on figures gained from studies in the Northern Hemisphere, particularly the United States. These figures do not adequately reflect the unique social and cultural practices and values of countries and communities in the Southern Hemisphere and consequently methods of supporting first year students from underrepresented sectors need to be re-evaluated if effective support practices are to be truly equitable. Current approaches to equity seem to be more concerned

with, "bums on seats, equity advocates draw attention to which bums, in what proportions and more to the point which seats, where" (Gale, 2009, p. 1). Simply counting the numbers of students from underrepresented groups who have enrolled in first year study is a limited view of social inclusion. Supporting equity groups in first year study is necessary if they are to be successful, with support including, "...mentoring, counselling, accommodation, health care and childcare" (Gale, 2009, p. 8).

Traditional social science attempts to describe the world from the experience of the educated and privileged communities of North America and Europe. Connell (2007) argues that this view of the world supports a predominantly capitalist set of values concerned with continually increasing output and consumption of the products of the industrialised world. As such, it does not acknowledge the role of culture and customs of other countries and communities. Connell argues "Sociological theori[s]ing about globali[s]ation embeds a view of the world from the global North, and therefore has not opened a fresh path for sociology" (2007, p. 63). As a consequence of this view, globalisation is seen as a mechanism that seeks to expand to all corners of the globe to promote its own values and does not acknowledge the knowledge that exists in the culture and customs of other countries and communities. To base a system of education that provides equitable access to members of the communities in the southern part of the globe it aims to serve, on the values espoused by the privileged elite of North America and Europe, cannot achieve the level of social inclusion and equity it seeks to achieve. Connell's (2007) southern theory offers a paradigm of sociology that includes the cultural, religious and social customs and knowledge embedded in those customs that are unique to their geographical location. It is, therefore, capable of recognising the importance with which these issues must be considered to ensure an equitable system of education reflects and acknowledges the uniqueness of the communities it serves.

First Year Experience Questionnaire

Student engagement

A sample of students from nine universities across Australia was surveyed by mailed questionnaire resulting in 2,422 responses, corresponding to a response rate of 24%.

(James, et al., 2010). Key findings from the survey include characteristics of low SES groups, the hours attended on campus and the impact of paid work on study. Low SES and rural students reported more often than other groups that their final year of secondary schooling was not effective preparation for first year university. These groups also felt pressured by the financial commitment parents have made in paying for their university course and regard that their parents do not understand what university is about (James et al., 2010). Under these conditions, the quality of family support offered may not be of value in helping the student deal with problems at university. It is also likely that many students in these groups are faced with contributing to the family income as their first priority, leaving their study as a secondary consideration. Risk of academic failure is related to financial commitments, lack of parental support and paid work. "The factors associated with low achievement and risk of failure include pressure from financial commitments, perceived lack of parental understanding and social support, lack of preparation for university study and excessive hours of paid work" (James et al., 2010, p. 2).

The results that indicate engagement with learning (James, et al., 2010) show a decline in on-campus hours in first year with the majority of students attending four or less days on campus. Course contact hours have also dropped from 16 hours per week in 2004 to 15 hours per week in 2009 with the norm for the majority of students being 15 hours or fewer per week (James et al., 2010). Private study time has dropped to 10.6 hours per week from 2004 to 2009, with students reporting in 2009 that they spend six point four hours for study purposes compared to four point two hours in 2004 (James et al., 2010). For B.Ed-P students who have a full time on campus load of 12 hours per week this means they spend less than one hour of private study per hour spent on campus. Equally concerning is that only half of first year students reported that they felt like they belonged on campus (James et al., 2010).

The amount of paid work that first year students have to undertake to meet basic financial needs continues to increase, 61% in 2009 which is up from 55% in 2004 (James et al., 2010) and is a cause for concern as this is time that they do not have available for study. "The full time students who are working average close to 13 hours per week of paid work" (James et al., 2010, p. 3). These longer hours of work have been associated with lower marks and increased risk of deferrals and remain a cause

for concern for faculty. Vivekananda and Shores contend, "Students do not study in isolation from other aspects of their lives" (1996, p. 4). Rather, students are faced with the at times difficult and challenging prospect of adapting their study requirements with other requirements in their lives. These include family, financial, social and cultural commitments, in short, within their multifaceted lifeworld (Crosling et al, 2009; Devlin et al., 2009; Habermas, 1984; Mezirow, 1991; Northedge, 2003; Walker-Gibbs, 2008).

Student diversity

The past decade has seen an increase in the diversity of students, enrolling in university courses, representing different cultural and social values of what are appropriate interpersonal conduct and the expectations of what it is to be a university student (Crosling et al., 2009; DIIRSTE, 2010; James et al., 2010; Krause, 2011, Walker-Gibbs, 2008). University-2 and its students represent a knowledge community where ideas and values are exchanged through academic discourse (Northedge, 2003; O'Shea, 2011; Paavola et al., 2004; Scutter et al., 2011). The challenge for many first year B.Ed-P students is in understanding that discourse, learning how to engage with it and contribute to it, in order to be members of the knowledge community. "Many come to academic discourse expecting it to complement the knowledge produced in their other lifeworlds, but instead, find it [to be] discordant and unsettling" (Northedge, 2003, p. 23). Students then need to develop an appropriate voice in order to participate with the measured, logical and reflective nature of academic discourse. In contrast, personal or tribal discourse, as used in the media and our home life, is more concerned with being consistent with accepted social norms that maintain group loyalties and relies on common and uncritically adopted perceptions and assumptions. According to Northedge, "To be asked in academic discourse to adopt a worldview that embraces new ideas and values is more than an intellectual challenge; it sets up conflicts with the roles through which the student accomplishes daily life" (2003, p. 27). Learning to become a member of an academic knowledge community requires students to use academic discourse in order to effectively participate within the knowledge community. Pre-service B.Ed-P students require learning activities that provide them with opportunities to engage with academic discourse and hence become a participating member of a knowledge community (Crosling et al., 2009,

Krause, 2011). Small group work and reflective writing are methods that allow students to reflect on their existing values and the requirements of the new knowledge community they are seeking to become a part of through the course of their university study (Crosling et al., 2009; Krause, 2011; Northedge, 2003).

Academic teaching staff are established members of the knowledge community and participate generatively, through processes of writing texts and journal articles, developing and delivering course materials and conference presentations (Northedge, 2003). This level of participation is authentic and transformative with these members possessing legitimate knowledge that can be passed on through teaching practice to students (Cranton & Carusetta, 2004; Gravett & Peterson, 2002). First year students, such as the B.Ed-P students, however, participate vicariously, through processes of reading texts and journal articles, attending lectures and writing essays and assessment tasks as they navigate their way through the learning expectations of first year study (Northedge, 2003).

Small group work allows B.Ed-P students to develop confidence and skills at becoming a self-directed learner (Crosling et al., 2009; Krause, 2011; Lizzio & Wilson, 2005). However, it is unrealistic to expect that new students should be able to operate as effective members of a group or team that requires all decision making and problem solving to be carried out by themselves. The limited skills they bring to these activities require some guidance from academic teaching staff in the initial phases if they are to acquire the skills to effectively self-manage their own activities and those of the group members. "The stance that students should take responsibility for their learning does not necessarily mean that they should be left to their own devices or naïve capabilities to manage group experience" (Lizzio & Wilson, 2005, p. 376). One way to achieve this is for academic teaching staff to operate as facilitators of students learning of group behaviours and expectations, acting as a knowledgeable guide and providing a supportive environment as students develop their own forms of understanding, expression and action as a member of a self-managed group (Lizzio & Wilson, 2005).

The nature of small group work is synonymous with a community of learning and small groups represent a microcosm of the greater community of knowledge that students are involved with in the self-directed learning environment of first year study

(Northedge, 2003). B.Ed-P students need to establish their sense of identity as becoming a member of a learning community involves their adjusting to a community of practice that fosters both the social and the academic aspects essential to effective engagement with university learning (James et al., 2010; Scutter et al., 2011). Acquisition of knowledge and cognition are, therefore, not restricted to either the social or the academic knowledge necessary for engagement, but encompass both the social and the academic domains of the learning environment. "Cognition and knowing are distributed over both individuals and their environments and learning is situated in these relations and networks of distributed activities of participation" (Paavola et al., 2004, p. 574). This distribution of cognition occurs in small group work, the greater university community of learning and the students' individual lifeworld. From the perspective of communities of practice, the student's lifeworld can be interpreted as consisting of the interaction between the community of learning that they are adjusting to, their community of family, their community of work and the social and cultural values of the society in which they have grown up and the society in which they now live. It is these interactions in the form of sociolinguistic action (Habermas, 1984) that form the networks of distributed action and thought that form the attitudes, values and beliefs that govern participation and engagement with new communities, new ways of thinking and communicating using new discourses (Andrews, 2005; Benson et al., 2014; Paavola et al., 2004).

Recent Studies in Student Experience

First year experience, especially in the early days and weeks, is of concern to universities as student experience in this time is a determining factor in whether or not they complete first year undergraduate study (Crosling et al., 2009; Devlin et al., 2009; James, et al., 2010; McInnis, 2001; McInnis & James, 1995). This has long been the focus of first year experience research as universities seek ways to improve student retention. The large influx of students during the decade 1990 to 2000 brought into question the socialisation elements of university life and indeed the then structure of undergraduate degrees (McInnis & James, 1995). Research to date, for example: the First Year Experience Questionnaire (James et al., 2010), has generally focused on the treatment and representation of equity and underrepresented groups together with much time and effort invested to better understand the role of the university in

influencing students' lives. While equity groups have traditionally been singled out for special treatment and support, what is needed is research into how student diversity can enrich the university experience, not just for those previously defined equity groups but for all students (McInnis, 2001).

Arvanitakis (2014) describes his own experience as the son of Greek immigrants and the first member of his family to study at university. The day before he started university he asked his father what he should take to university. His father's reply was: "I don't know, ask your mother". His mother when asked what he should take to university said, "a pen and some paper and some lamb so you can make friends".

This is illustrative of the difficulties facing many FIF students especially those from differing cultural backgrounds. His father was unable to make any suggestion at all while his mother's suggestion to take some lamb so as to make friends, shows the Greek cultural importance of lamb in their diet and that the sharing of lamb is a customary way in which to make friends.

His experience of his first day at university, sitting in a lecture theatre with 1000 other students, is typical of many commencing undergraduates. "I remember being overwhelmed and intimidated by the number and array of students" (Arvanitakis, 2014, p. 736). Feeling intimidated and overwhelmed also made him feel embarrassed to get up and walk out of the lecture, "Too scared to move, I sat through the class, petrified that I would be asked a question" (Arvanitakis, 2014, p. 736).

However, as a graduate of Sociology and currently a coordinator of first year subjects he argues that massification, while leading to increased staff to student ratios, allowed him to attend and graduate from university. Massification also offers an opportunity to review pedagogical practices including allowing students input to the design of course material. This was seen as a way of allowing students to engage with course material and expands the concept of student engagement to beyond the classroom (Arvanitakis, 2014).

Oakley, Lock, Budgen and Hamlett (2011) studied the attendance of pre-service teachers at lectures and tutorials. Of 267 pre-service teachers who responded, the majority reported having to do some form of paid work during the course of their

studies with only 17.4% reporting they did no paid work at all. "More than three quarters (76.5%) of the students surveyed reported that they engaged in at least six hours paid employment per week, with 20.7% reporting they engaged in at least 21 hours paid employment each week" (Oakley et al., 2011). Students who engage in paid employment of more than 11 hours per week are regarded as being at risk of academic failure (James et al., 2010). Other reasons reported for non attendance included genuine illness, uninteresting lectures, too tired and too busy.

It is likely that given the high number of students reporting they have to engage in paid employment while studying, that the responses of too tired and too busy, may be linked particularly in the case of students working more than 21 hours per week. One in five students were found to be engaged in paid employment of 21 hours per week, however, of additional concern is the 38.8% who worked more than 16 hours per week and the 59.9 % of students who worked for over 11 hours per week (Oakley, et al., 2011).

The age of students was also found to be significant with older students attending more lectures and tutorials than their younger counterparts. The reasons for this are not exactly clear; however, it may be related to a, "...preference for face-to-face learning as opposed to online learning", (Oakley, et al., 2011, p.45) on the part of older students. This preference has then also to be considered for commencing B.Ed-P students, and suggests that a blended mode of delivery of course material may have wider appeal to a diverse student population. Older students were also found to be more confident in their ability to succeed with university study. "This may be related to their level of confidence or to their personal theories of what learning entails" (Oakley, et al., 2011, p.45).

The Transformative Nature of Higher Education.

In a four year longitudinal study of students enrolled in a Bachelor of Sociology degree course (Benson, Heagney, Hewitt, Crosling & Devos, 2014) used thematic analysis to determine if students experienced perspective transformation (Mezirow, 1991) as a result of their studies. A total of 11 students were interviewed before enrolment, midway through the course and at graduation.

Given the barriers to higher education which frequently need to be overcome for successful study, and the related changes in perspective that may be required, information about the role of perspective transformation is potentially important in guiding teaching, support and management strategies for positive study outcomes.

(Benson et al., p. 9, 2014).

Seven of the 11 students interviewed prior to course commencement showed evidence of perspective transformation suggesting they were actively engaged in reflecting on what their role as learners in a university environment would be. Three of these students commented that university study was for them a disorienting dilemma.

Of the 11 students studied, the reported experience of 10 students suggested evidence of perspective transformation with five students exhibiting changes in the acquisition and use of knowledge, suggesting changes of epistemic habits of mind. These students were all in their 40s with the evidence suggesting a potentially greater impact when undertaking university study later in life. A gradual change in their perception of themselves as learners was reported by five students, a total of eight students, including the five already referred to, identified specific change points including assignment results, feedback and field placements. "The evidence of perspective transformation by all but one participant during the course appears to suggest that the experience of study success had a greater impact on perspective transformation than the events that led to enrolment" (Benson et al., p. 23, 2014).

All students reported that family support, varying responses to their student peers, first and second placements, and lecturers and tutors, were key factors in their study success. Eight students also reported that feedback was important to them in their study success. Academic teaching staff and support staff can promote perspective transformation by facilitating peer interaction through orientation and student group activities, practical learning experiences including role plays, provide prompt feedback and offer flexibility in enrolment and study techniques (Benson et al., 2014).

While the focus of the current study is commencing undergraduates in the Bachelor of Education (Primary), the work of Benson et al.(2014) suggests that transformative learning experiences, in particular how a student perceives themselves as a university

learner, can occur at any stage throughout a course of study. Focussing on the transformative aspects of learning for commencing undergraduates would equip them for developing successful study habits that would benefit them not only in succeeding at first year study, but during the entire course of study as well.

The utilitarian expectation of gaining a degree

Laming (2012) reviewed the traditional liberalist-humanist view of higher education in the context of the changing nature of the Australian demographic, the role of women, employment patterns and popular culture. These changes have resulted in more students entering university from increasingly diverse backgrounds and levels of society: "Until recently, undergraduate university students were drawn from a narrow band of society and shared similar backgrounds, educational experiences, values and expectations" (Laming, 2012, p. 3). These students were seen as a model for university entrance and academic success. However, the background of first year students currently entering Australian universities is increasingly diverse in terms of their prior educational experience, ethnicity, family backgrounds and ambitions. The traditional liberalist-humanist view that higher education was a way to develop the intellect and cultivate character is no longer the only view with which young people regard university study (Laming, 2012). Student expectations of university are shaped by the diversity of social backgrounds from which they originate. The opportunity for employment, free from class restrictions on who may obtain a certain profession, has resulted in students entering university with a more utilitarian view. For these students the purpose of entering university and gaining a degree is to position themselves for greater access to employment opportunities. The shift away from liberalist-humanist expectations of university study to a more utilitarian expectation of gaining a degree to obtain a desired profession represents a transformation in student values, attitudes and beliefs.

Social and academic transition

Fetherston and Kelly (2007) explored the role of transformative learning in conflict resolution. They examined the extent to which the transformation of existing ways of thinking, promoted the development of new solutions to problems. "Through changes in understanding and perspective, through the reframing of problems, personal and

social transformations become possible" (Fetherston & Kelly, 2007, p. 264). For adult students from diverse cultural and socio-economic backgrounds the experience of learning in a new environment such as a university has the potential to act as a disorientation or disruption to existing values and beliefs. Tutorial activities that promote reflection then need to be considered as teaching practice that may assist with problem solving in this new environment. Fetherston and Kelly contend that, "It is through reflection that we can recognise problems, as well as the way problems are framed, and take steps to solve them" (2007, p. 268).

The experience of commencing university study potentially represents a disruption for students as they are faced with transition between previous education experiences and a new learning environment. Einfalt and Turley (2009) studied the experiences of first year students in a business studies course at the University of the Sunshine Coast and suggest that, "First year students have special learning needs due to the social and academic transition they are experiencing" (p. 45).

Social knowledge

O'Shea (2011) explored how a group of female students, who were all the first members in their family to attend university, experienced their identity as a student in the university environment. In the typically diverse cohorts currently found in first year undergraduate study, there is an equally diverse perception on the part of students as to what engagement with the university landscape means to them. According to O'Shea, "...not all students seek a strong student identity nor expect close affiliation with the institution" (2011, p. 3). First in family students arrive at university not from a perspective of deficient knowledge or the lack of capacity to acquire new knowledge, but with knowledge that is relevant in their social world or social community of practice. This social knowledge is not necessarily valued in the university community resulting in feelings of alienation and not belonging. An individual's identity is formed from the characteristics, attitudes, values and beliefs that the individual holds as valid interpretations of the self and their participation in accepted cultural and social practices. As such, identity is a socially constructed phenomenon and is, therefore, subject to experiences and influences that can result in a transformation of identity. "While moving into the university landscape may

engender a sense of dislocation for some students, it also has the potential for powerful transformations of identity" (O'Shea, 2011, p. 5).

Within the diverse character of the university environment, establishing one's identity as a student is not a simple process, nor is it one that happens as soon as one walks onto a campus. An individual's life journey may be considered as a diaspora of attitudes, values and beliefs that represent the fluid and multiple narratives experienced as one positions ones identity within multiple and often disparate environments. For mature age first in family students the process of identifying as a student while at university and then identifying as a mother, father, partner or other figure in their social world can be a confusing and dislocating situation. "The resulting transformations in relationships with family, peers and self can result in students having to straddle themselves between two distinctive and largely separate worlds, never completely fitting into either environment" (O'Shea, 2011, p. 6).

The growing diversity of students entering first year undergraduate courses continues to generate interest in identifying factors that predict academic performance. The diversity of student backgrounds and prior educational experience requires examining academic, psychosocial, cognitive and demographic factors in an attempt to predict academic performance and the subsequent selection and delivery of support services for students who are at risk of academic failure. A survey conducted by McKenzie and Schweitzer (2001) of 197 students was carried out to identify factors that could be indicative of potential academic failure. Academic indicators based on secondary school achievement were found to be a less reliable indicator of mature age student performance compared to school leavers. Additionally, female students with the same grades as males consistently performed better at university. Students who had poor study skills were found to be more likely to withdraw from university.

Psychosocial predictors, academic and social integration were found to be significant predictors of student attrition while cognitive indicators such as self-efficacy, the belief that one will do well, were shown to be predictive of academic success. Treating the age of a student as a demographic predictor showed a relationship between mature age students and academic success. This has also been observed by McInnis and James (1995) with the conclusion that mature age students are likely to have a clearer focus on career orientation as well as having lower social integration

needs. However, students who had to do paid work for 15 hours or more per week were more likely to drop out or defer their studies than students who work less than 15 hours per week.

In a longitudinal study, Hillman (2005) followed the experiences of year nine secondary students as they progressed to their first year in university and TAFE. Students enrolled in undergraduate degree courses, (n = 2,521), reported several areas of difficulty as they adapted to the study load of the university learning environment. These included difficulties with paying fees 25%, juggling work and study commitments 50%, finding time for other commitments 44%, and balancing personal relationships with study 31%. Students also reported that the course was more difficult than they expected 34%, and that they experienced conflicts between family commitments and study 17%. These difficulties are consistent with the findings of other studies (James et al., 2010; Brinkworth, et al., 2009; Crisp, et al., 2009; McInnis, 2001; McInnis & James, 1995; Scutter, et al., 2011; Vivekananda & Shores, 1996) that have researched student experience in first year undergraduate courses.

Student expectations of undergraduate study

A 2011 survey of newly enrolled students conducted during orientation activities prior to the commencement of the academic year at the University of Adelaide, the University of South Australia and Flinders University provided information about the expectations these students had of university study (Scutter et al., 2011). Of the 3,091 students surveyed across the three campuses the gender breakdown was 65% female and 35% male, with 42% of students being the first member in their family to attend university.

Most students 78% had completed year 12 or 13 with 8% entering with TAFE qualifications. Expectations of students included easy access to lecturers and tutors after face-to-face class time 87%, and that academic staff would supply all the materials required for learning 68%. Attending lectures was seen as important to their learning 94%, and that group work was an important learning experience 76%. Students also reported 33%, that being able to manage their own time was a valuable skill for studying.

Qualitative responses were analysed using a thematic analysis and showed that of 59% of students who responded to the question; *why they had enrolled*? claimed that getting a good job was their main reason.

In a study at the University of Adelaide, Crisp, Palmer, Turnbull, Nettelbeck, Ward, & LeCouteur (2009) surveyed 979 students in 2006. The survey was conducted again in 2007 with 1,774 respondents. Both studies used a paper based questionnaire to determine student expectations of what university study would be like. The majority of first year students often experience the expectations of university study as challenging and difficult to understand and adapt to (Crosling et al., 2009; Fetherston & Kelly, 2007; Hillman, 2005; James et al., 2010; Krause, 2011; Northedge, 2003; O'Shea, 2011). As universities seek to improve student retention, particularly in first and second year undergraduate courses, understanding of student expectations and experience can assist universities with improving the alignment between students' expectations and experience. The study conducted by Crisp, et al. (2009) suggests that there is a level of disparity between student expectations and the nature and practice of first year university study.

This may arise because students have unrealistic expectations of what will transpire during their time at university; it may also arise because of misunderstandings associated with the information provided by the institution about its culture or because the institution is simply unaware of students' expectations

(Crisp et al., 2009, p. 13).

Of the students surveyed, 40% reported they had activities outside of university study that might limit the amount of time available for study. Responses to the amount of time students expected to spend on private study suggested that they may not be aware of the study workload associated with university study. In response to the amount of time they expected to have to spend in private study 69% (2006) and 67% (2007) reported that they would need to spend 11 hours per week. Lecturers could assist students in this regard by making explicit the time requirements for assessments and study, and emphasising that the time spent in private study is an indicator of successful course completion. With the majority of students 70%, reporting that they

expected to be able to combine study with paid work it is important that they are made aware of the amount of private study time they will need to undertake, if they are to balance their commitments effectively. "For students who rely on a variable and uncertain income to pay for their basic necessities such as food and rent, or even basic travel and social expenses, the priority behaviour is to attend paid work rather than attend lectures" (Crisp et al., 2009, p. 23).

The expectations students reported (Brinkworth et al., 2009) included that lecturers will read drafts of their work; with greater than 50% of students believing that essays and assessment tasks will be marked within a week. A further 33% of students expected to have easy access to teaching staff outside of face-to-face class time. These expectations are a cause for concern for faculty and school staffing and budgeting. With faculties and schools having to compete for resources, financial and staffing, together with the fact that academic teaching staff have to follow prescribed workload models it is very difficult for universities to meet the expectations expressed by students. However, if these considerations are communicated to students they will be better able to understand and engage with the nature of first year study (Crosling et al., 2009; Devlin et al., 2009).

Brinkworth et al., (2009) extended the work on student expectations by surveying science and humanities students who took part in the study of Crisp et al., (2009). Science and humanities teachers were also surveyed with the findings that there was a mismatch between student learning styles and teaching methodologies (Brinkworth, et al., 2009). This was most evident in the areas of feedback and turnaround time for marking of assessments. "It is this disjunction that goes a long way to prove that the transition process between secondary and tertiary education is acute and remains fraught with inconsistencies" (Brinkworth et al., 2009, p. 169). Over the past decade research has shown that as many as 60% of first year students feel they are not well prepared for the changes in learning style they experience at university (Crosling et al., 2009; Hillman, 2005; James et al., 2010: Krause 2011).

The disparate nature of student expectations and the realities of first year study provide an environment where students are highly likely to experience one or more phases of transformational learning (Mezirow, 1991). Transformational learning brings with it experiences of self-reflection and navigating a new course of action

(Cranton, 2002; Mezirow, 1991, 1998, 2000). These same conditions represent a potentially transformative experience (Cranton & Carusetta, 2004; Gravett, 2004; Gravett & Petersen, 2002) for teaching staff as they try to align student expectations and experience with teaching practice and methodologies.

Parallels can be drawn here with emancipatory learning (Habermas, 1984; Mezirow, 1991, 2000) and instrumental learning (Mezirow, 1991). Emancipatory learning requires interpreting another person's words and actions within a socio-cultural context with a view to establishing that individual's authenticity and through the process of discourse arrive at a consensus of the validity of their claims, with the intention of making meaning. Instrumental learning, however, is involved with manipulating the environment through choice of accepted truths with no process of inquiry as to why these truths are valid or how they came to be regarded as valid (Mezirow, 1991, 2000).

Student motivation

Motivation is a significant factor in academic success (Brinkworth et al., 2009; Gravett & Petersen, 2002; Gravett, 2004; James et al., 2010) with students reporting in many surveys and interviews that they are motivated to succeed in order to obtain a degree and a good job. For B.Ed-P students, self-actualisation levels (Maslow, 1943) can be seen in their sense of achievement at succeeding in their studies and their need to graduate in order to be what they believe they must be, in this context a primary school teacher.

Summary

The review of the literature provides evidence of the enduring nature of transformational learning theory (Mezirow, 1978, 1990, 1991, 1998, 2000, 2003) and the recognition attributed to the theory by educators and researchers (Benson et al., 2014; Cranton, 1995; 2002; Cranton & Carusetta, 2004, Cranton & Hoggan, 2012: James et al., 2010, Krause, 2011; Willis, 2007). Transformational learning theory with its emphasis on changes of perspective in the learner's lifeworld is an effective lens for examining the personal and academic challenges facing commencing first year pre-service teachers.

Massification has seen the relaxing of entry standards in some Bachelor level courses as universities attempt to meet the targets imposed by The Review of Australian Higher Education: Final Report (Bradley et al., 2008). This has resulted in university management and staff adopting multiple entry pathways to higher education with a focus on retaining first year students who can then progress to second year study. As a result of increasing diversity among first year student cohorts, the past two decades have seen increasing research into student's experience of their first year at university.

Providing a learning environment where first year students can engage with the university teaching style continues to be a major area of research (Arvanitakis, 2014; Benson et al., 2014; Brinkworth et al., 2011; Crisp et al., 2009; Crosling et al., 2009; Dawkins, 2014; Devlin et al., 2009; Einfalt & Turley, 2009; James et al., 2010; Krause, 2011; Lizzio and Wilson, 2005; McInnis & James, 1995, McInnis, 2001; Northedge, 2003; O'Shea, 2011; Paavola et al., 2004; Scutter et al., 2011; Vivekananda & Shores, 1996; Walker-Gibbs, 2008).

The recent changes to funding of the higher education sector by the Liberal Abbott Commonwealth Government pose the greatest concern for the continuation of a higher education system that has focussed on improving participation from underrepresented groups within society (Dawkins, 2014; Dobson, 2001; Gale, 2009; Laming, 2012).

Chapter Three will identify the research methods to be used in the current study with transformational learning theory adopted as the theoretical construct for the study.

Chapter Three - Research Methodology

This chapter presents the research methods employed to gather data including a survey questionnaire and face-to-face interviews with students. Survey questions will focus on student demographics, issues they face while adapting to the university environment, and the extent to which they form relationships with academic teaching staff and peers. Face-to-face interviews will be transcribed and then analysed for recurring issues relating to how students have experienced the first four weeks of their study. The chapter begins with a theoretical framework based on transformational learning theory (Mezirow, 1991) and then moves to the development of survey and interview questions and the mapping of these questions to phases of transformational learning.

Theoretical Framework

The theoretical framework for this study was Mezirow's (1991) Transformational Learning Theory which identifies uncritically assimilated attitudes, beliefs and values typically adopted in childhood, as constraining an adult's ability to develop understanding from new experience. This tension between the old and the new can precipitate a disorienting dilemma. Disorientation can be followed by critical reflection of how these existing values came to be adopted. In turn this can lead to a withdrawal or liminal phase where the new values being encountered are examined. Provisional trying of new roles and validity testing of new values then occurs through a process of social discourse leading to a reintegration of the new into one's life on the basis of conditions dictated by ones changing perspective (Mezirow, 1991). The transformational learning cycle shown in Figure 3.1 represents these phases. The cycle is iterative in that reintegration may lead to awareness of another disorienting dilemma.

Previously held values and expectations of students' learning may lead them to question how they can adapt to the requirements of the University-2 program in their first year of study. Adapting to these requirements represents a state of uncertainty or conflict with their existing learning values and their ways of knowing (Northedge, 2003). It is their individual experience as students that forms the primary context in which transformation of existing attitudes, values and beliefs occurs and is

representative of their lifeworld (Mezirow, 1991, Northedge, 2003; O'Shea, 2011); the prior experience of attitudes and assumptions that they bring with them to the learning experience as well as what they experience as participants in a learning environment. This is the starting point for the critical assessment of the learner's value judgments and expectations (Mezirow, 2000, 2003; Northedge, 2003; Taylor 2007).

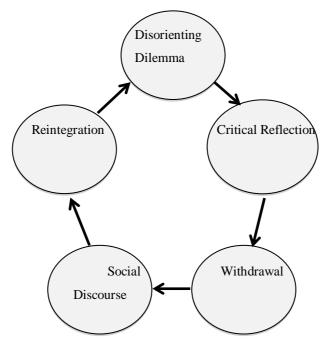


Figure 3.1 - Stages in the Transformational Learning Cycle.

Research Development

The current study was conducted at a large multi-campus university in Perth, Western Australia. With two campuses operating in the Perth area the university is a major provider of pre-service teacher education. The research commenced with a review of the literature to determine how to characterise the adjustment process that people go through as they experience new and unfamiliar situations. This revealed the transformational learning model devised by Mezirow (1978, 1991). The framework describes the stages and processes that typically occur during such an adjustment.

The research was developed using a mixed methods approach that consisted of a survey questionnaire and case study interviews. The survey consisted of 34 questions

(Appendix A) which were divided into three sections and was administered using QualtrixTM online software. Students were provided with an online link to the survey during information technology classes. Consistent with human ethics requirements the survey contained an introduction page outlining the purpose of the research and had an 'I Agree Button' to allow the students the option of proceeding with the survey or not. The survey comprised three sections.

The first section included questions one to 18 designed to gather demographic information about students' access to information and communication technology (ICT), postcode, hours worked in paid employment, date of birth, child care requirements, travel time, first member in family to attend university, language spoken at home and prior level of education. Frequency responses to these questions were reported as percentages of the population sampled and provided a description of the student's lifeworld experience prior to commencing university study.

Section two comprised questions 19-30 and was focused on the student's academic experiences. The questions in this section were adopted from the First Year Experience Questionnaire (James et al., 2010) to ensure reliability and asked for student responses to four categories of behaviour that had been identified as representative of being at risk of academic failure. The four categories were Academic Orientation, Student Identity, Academic Application and, Comprehending and Coping.

Academic orientation is a measure of the enjoyment students experience from the intellectual challenge of course material and the level of satisfaction they derive from studying (James et al., 2010). Student identity measures the sense of self in relation to aspects of being a university student. The two aspects measured are, really like being a university student, and that university has not lived up to expectations. Academic application measures students' behaviour and attitudes towards study as they adjust to the requirements of university study. Comprehending and coping are measures of how a student deals with the study workload and how she or he comprehends the material they are studying (James et al., 2010).

The questionnaire was scored using a 1–6 Likert Scale and analysed using frequency analyses and Pearson Coefficients using Statistics Package for Social Sciences

(SPSS). Each of these questions was mapped (Appendix B) to the phases of transformational learning (Mezirow, 1978, 1991) allowing statistically significant data to be produced describing the transformational learning experienced by students.

The third section consisted of four questions designed to measure student perceptions of their relationship with academic staff and other students. The responses to these questions were scored on a 1–6 scale, from unsupportive to supportive, with the results calculated as averages using the average function available in the Qualtrix TM software. The last page of the survey contained an invitation to students to participate further in the case study interviews. Students who elected to take part in interviews entered their email address and were subsequently contacted to arrange an interview time.

The sample

The target population for this study was a cohort of first year entrants to the B.Ed-P at a Western Australian university. Students who indicated on the survey that they would like to partake in an interview by including their email address were contacted and interviews were arranged. Education degrees are typically low ATAR degrees (Tertiary Information Services Centre, 2014) and have a history of attracting low scoring entrants. For Bachelor of Education students the ATAR for admission in 2014 was 65 whereas other degrees including law, engineering and medicine have minimum ATAR requirements between 70 and 90 (TISC, 2014).

Research design

The study used a mixed methods approach consisting of a survey and interview. Survey responses were used to determine characteristics of the students' lifeworld and investigate transformative elements of student experience. Interview responses were used to construct case studies of student experience. The survey was administered online in first year Information Technology courses using QualtrixTM software and took students approximately ten minutes to complete. To comply with university human ethics requirements the first question of the survey contained a statement that the survey had approval from the human ethics officer and detailed why the survey was important in understanding how students experience their first few weeks as

university students. An 'I Agree Button' was included to provide students with the option of proceeding with the survey or not. If a student chose not to click on the agree button the survey was terminated at that point. The final question in the survey asked if students would be prepared to take part in a 12 question interview by having the option to include their email address. Students who included their email address were contacted to arrange a time that suited them to take part in the interview. A total of 17 students indicated by this method that they were prepared to take part in an interview, however, when contacted only 11 students arranged a time for the interview. Students were given the opportunity to partake in the interview through face-to-face contact, telephone or email.

Survey questionnaire

Snyder (2008), in a review of studies in transformational learning conducted in the last decade, indicated that five of the 10 studies used grounded theory, five used questionnaires, eight used interviews, four used qualitative and quantitative design elements and 10 used qualitative design elements. All 10 studies cited Mezirow (1991). The use of mixed methods including interviews, case studies, grounded theory, quantitative and qualitative methods supports these methods as suitable for Mezirow's (1991) work to be useful in analysing the learning experiences of adults as they engage with new experiences and the level of transformation occurring when faced with new and unfamiliar experiences. The transformative nature of construing meaning from these experiences results in a transformation of students existing attitudes, beliefs and assumptions.

The author of the present study was a learning advisor in a preparatory course that provided students with an alternative entry pathway to undergraduate studies. The role required provision of academic and pastoral support for students who were having difficulty in fitting in with the demands of university life. In this role the author had no input into assessment strategies. However, experience with pre-first year students has given the author an insight into the difficulties students face as they undertake university study and has led the author to adopt the research methods used in transformational learning studies (Snyder, 2008) as a valid methodology to examine the transformative experiences of first year students.

Description of Survey Questions

The first section of the survey questionnaire contains 18 questions designed to gather comprehensive demographic data about first year students. The questions are listed below in Table 3.1. The collection of demographic data provided information on student experiences prior to their enrolling in university. This information was valuable in determining the experiences and responsibilities students bring with them to the university learning environment. It is also indicative of their lifeworld and the impact existing life responsibilities have on their ability to engage with first year undergraduate study.

The questions in section two of the survey were adopted from the 'First Year Experience Questionnaire' (James et al., 2010). The first year experience questionnaire has been operating since 1994 across a sample of Australian universities and provides reliable longitudinal information on the nature of first year experience as reported by students. The questions adopted measure academic orientation, student identity, academic application and comprehending and coping. This group of questions was chosen for the current study in order to gain insight into the attitudes and difficulties facing first year B.Ed-P students.

Table 3.1 First Section Survey Questions

| Question | Survey Question |
|----------|----------------------------------------------------------------------|
| Number | |
| 1 | What is your gender? |
| 2 | In what year were you born? |
| 3 | What is the postcode where you live? |
| 4 | What is the principal language used in your home? |
| 5 | What was the last educational institution you attended and the level |
| | you reached? Year 10, Year 11, Year 12, TAFE: Cert I, Cert II, Cert |
| | III, Cert IV, University, Other |
| 6 | Are you the first person in your family to attend university? |
| 7 | Do you do any paid work? |
| 8 | If you answered yes, how many hours do you work per week? Less |
| | than 5, 5-10, 10-15, 15-20, 20-25, 25-30, 35-40, more than 40 |
| 9 | Do you have to arrange childcare to do this course? |

| 10 | How long does it take you to travel from home to work? |
|----|---------------------------------------------------------------------|
| 11 | I mainly use public transport Yes/No or I mainly drive my own car |
| | Yes/No |
| 12 | Do you have access to a computer for study purposes where you live? |
| 13 | What type of computer is it? Laptop, Desktop, Notebook, Tablet |
| 14 | Do you have access to a computer for study purposes at university? |
| 15 | What type of computer is it? Laptop, Desktop, Notebook, Tablet |
| 16 | Do you have access to a Broadband Internet connection where you |
| | live? |
| 17 | If you own a Laptop, Notebook or Tablet computer do you bring it |
| | with you to university? |
| 18 | Do you have access to your own quiet study space where you live? |

To position these questions within the framework of transformational learning and contextualise the transformative experience of first year students within the categories of academic orientation, student identity, academic application and comprehending and coping the following phases of transformational learning theory (Mezirow, 1991) Table 3.2 were mapped (Appendix C), to the first year experience questionnaire questions. The questions adopted were chosen as they provided the opportunity for students to respond from the perspective of the issues most important to them as they adapt to the first year university experience.

Table 3.2

Phases of Transformational Learning Theory Adopted for the Current Study

| Number of Phase | Transformational Learning Phase | | | | |
|-----------------|-----------------------------------------------------------|--|--|--|--|
| 1 | A disorienting dilemma | | | | |
| 2 | Self-examination with feelings of guilt or shame | | | | |
| 3 | A critical assessment of psychological, socio-cultural or | | | | |
| | epistemic assumptions | | | | |
| 4 | Exploration of options for new roles, relationships and | | | | |
| | actions | | | | |
| 5 | Acquisition of knowledge and skills for implementing | | | | |
| | one's plans | | | | |
| 6 | Provisional trying of new roles | | | | |
| 7 | Building of confidence and competence in new roles and | | | | |
| | relationships | | | | |

Academic orientation measures the level of stimulation and enjoyment students experience from lectures and subjects. Student identity is significant in terms of how a student identifies with the experience of being a student. Academic application is a measure of how student attitudes change as they engage with the requirements of university study. Comprehending and coping provide information about students' ability to comprehend the academic content of the course and how they cope with the academic work load.

The student responses to these questions provide an indication as to the level of intellectual challenge they experienced as a first year student. Similarly, responses to questions of student identity provided an indication of how students position themselves within the greater university community and how that community meets their expectations. The responses to academic application provided valuable information as to how a student's expectations changed as they adapt to the learning experience. Finally, the questions that addressed comprehending and coping revealed valuable information as to how a student dealt with the subject material. The responses to these questions indicated how well a student was coping with the academic study load of the course.

The above questions have also been adopted to permit analysis using the transformational learning framework (Mezirow, 1991). The framework describes the phases and processes adults go through as they adapt to and construe meaning from new experience and question and reflect on previously held attitudes and beliefs.

The categories chosen, the stated reliabilities for those categories and the questions used within those categories (James et al., 2010) are presented in Table 3.3.

Table 3.3
Reliability of Questions from First Year Experience Questionnaire

| | First Year Experience Questionna | |
|--------------------------|-----------------------------------------------------------------------------------------|--------------|
| Category | Questions | Reliability |
| | | |
| Academic Orientation | The lectures often stimulate my interest in the subjects | Cronbach |
| | I enjoy the intellectual challenge of the subjects I am studying | Alpha 0.7812 |
| Student Identity | I really like being a university student | r = 0.5059 |
| | University hasn't lived up to my expectations | (p < 0.001) |
| Academic Application | I find it difficult to get myself motivated to study | r = 0.2756 |
| | I regularly seek the advice and assistance of the teaching staff | (p < 0.001) |
| Comprehending and Coping | I find it really hard to keep up with the volume of work in | Cronbach |
| | this course I feel overwhelmed by all I have to do | Alpha 0.7675 |
| | My course workload is too heavy | |
| | I find it difficult to comprehend a lot of the material I am supposed to study | |
| | I have had difficulty adjusting to the style of teaching at university | |

Table 3.4

Mapping of Interview Questions to Phases of Transformational Learning

| Interview Question | Phase of Transformational |
|-------------------------------------------------------------|---------------------------------|
| | Learning |
| 1. What are your motives for studying | 5. Exploration of options for |
| at university? | new roles, relationships and |
| | actions. |
| 2. What do you think your family | 3. A critical assessment of |
| thinks about you attending university? | psychological, socio-cultural o |
| | epistemic assumptions. |
| 3. How have their views shaped your | 3. A critical assessment of |
| own? | psychological, socio-cultural o |
| | epistemic assumptions. |
| 4. What sort of work do you believe | 3. A critical assessment of |
| you would be good at? | psychological, socio-cultural o |
| | epistemic assumptions. |
| 5. Where do you see yourself in five years' time? | 6. Planning a course of action. |
| 6. How confident are you of being able | 3. A critical assessment of |
| to get there? | psychological, socio-cultural o |
| | epistemic assumptions. |
| 7. Are you open to alternative | 5. Exploration of options for |
| viewpoints? | new roles, relationships and |
| | actions. |
| 8. Are you experiencing any problems with university study? | 1. A disorienting dilemma. |
| 9. Can you tell me what the problems are? | 1. A disorienting dilemma. |
| 10. Are you aware of other students | 4. Recognition that one's |
| experiencing the same problems as you | discontent and the process of |
| are experiencing? | transformation are shared and |
| | that others have negotiated a |
| | similar change. |
| 11. Do you have a plan of action for | 6. Planning a course of action. |
| solving these problems? | |
| 12. Do you have the skills to | 6. Planning a course of action |
| implement a solution to your | |
| problems? | |

Case Studies

Case study interviews were conducted in weeks three and four of semester one, 2012 with students who indicated they were prepared to partake in an interview. Case studies were developed using the interview responses provided by the B.Ed-P students who took part in the interviews. The case studies provided rich data on the experience of students as they adapted to the first weeks of pre-service primary teaching and provided insight into their motives for studying at university. The interviews also permitted students the opportunity to express their experiences and answers to the questions in their own voice. In total 11 interviews were conducted and the results of the interviews were mapped to the phases of transformational learning, Table 3.4.

By mapping the phases of transformational learning (Mezirow, 1991) in Table 3.2 to the interview questions it was possible to identify the transformative nature of students' first year experience and how this transformation occurs within the students' lifeworld. The lifeworld consisting of existing and often uncritically assimilated values, attitudes and beliefs (Mezirow, 1991; Northedge, 2003; O'Shea. 2011) results in students experiencing first year study as a disorienting dilemma. The nature of the dilemma requires them to come to terms with the fact that their existing beliefs of what being a university student requires them to do, and how they go about adapting their existing learning experiences and their perception of themselves as learners in a new student centred environment are not consistent with the first year university experience. The mapping allowed a profile of student transformation to be developed within the context of being a first year university student and provided evidence of the way in which new experience can promote a re-evaluation of existing attitudes, values and beliefs.

Line-by-line coding (Charmaz, 2006) was used to analyse case study responses as it allows the researcher to generate codes that are substantive in relation to the area being analysed and ensures consistent and reliable interpretation of responses (Holton, 2007). The process described below was used to develop substantive codes and the processes operating.

- 1. The process begins by analysing interview responses to determine descriptive key words and phrases, typically nouns and verbs that indicate key concepts that are significant to the respondent. These words and phrases permit the formation of first level codes.
- 2. Descriptive words and phrases are then re-examined to identify the process or processes that link the descriptive words and phrases and required the researcher to look at adjectives and adverbs, thereby, allowing the development of second level codes that contextualise the responses provided by the interviewees.
- 3. These codes are then used to arrive at core codes that represent the students' responses to the interview questions.

Each interview, code, process and memo developed using the line-by-line process was uniquely identified with an alphanumeric code that permitted ease of cross referencing and consistent interpretation of responses. Initial coding was undertaken by hand and later transcribed to Microsoft WordTM for ease of searching, using the available navigation feature. Identified codes and processes were then grouped into core categories that provided answers to each interview question.

Questionnaire

Participant responses to interview questions were analysed using line-by-line analysis methods (Charmaz, 2006). The chief investigator recorded participant answers in writing at the time of the interview. The interviews were conducted in weeks three and four of the semester one 2012. Interview responses were hand coded and transcribed into Microsoft WordTM. The results of this coding process allowed identification of trends that permitted the development of a model and associated metrics to inform curriculum design and delivery strategies.

Instruments

Two instruments were developed for use in the current study. The first of these was an online questionnaire while the second was a face-to-face interview.

Survey

The survey used a questionnaire, conducted in the third and fourth weeks of semester one 2012, to gather information on students' initial feelings of their university experience. The questions were designed to provide a meaningful indication of student experience and if that experience may be interpreted as a disorienting dilemma based on the degree to which they feel comfortable or uncomfortable during their initial time at university. Experiencing a situation as a disorienting dilemma reveals that some form of transformational learning was taking place. It was also likely that further transformative experiences would occur as the individual student began to understand their own uncritically adopted attitudes, values and beliefs and then entered a reflective stage where uncritical habits of mind gave way to new beliefs and values. The questions were adopted from the first year questionnaire (James et al., 2010). Academic orientation is an indicator of the degree of enjoyment of study and intellectual challenge that student's experienced as a result of engaging with the course material. The degree to which a student enjoys being a university student is indicative of a student who has achieved some level of engagement with, and sense of belonging to, the university community (Brown et al., 1989; Crosling et al., 2009; James et al., 2010; Krauss, 2011; Northedge 2003; O'Shea, 2011; Paavola et al., 2004; Walker-Gibbs, 2008). Conversely a student who does not feel as though they belong to the university community will frequently feel lonely and isolated (Einfalt & Turley, 2009; Fetherston & Kelly, 2007; James et al., 2010; Krause, 2011). In this scenario a student may find it hard to become motivated and claim that the university has not lived up to their expectations. Either of these responses is an expression of the students sense of identity and how they perceive themselves, their peers, academic teaching and support staff and, the university community.

Students can also experience a change of attitude to the academic workload as the course progressed. Finally, questions in the comprehending and coping category once analysed, revealed how students' comprehended the academic content of the course material and how they went about trying to cope with the study workload. To permit analysis of the responses to these questions, from the perspective of how adults engage with and adjust to new experience, the questions were also mapped to phases

of transformational learning (Mezirow, 1991). Recording of responses used a six point Likert scale to avoid a "no comment" response.

Interviews

Interview questions were designed according to five criteria that had been selected from Mezirow's (1991) list of 10 phases of transformational learning. Draft questions appear in Appendix C. The five phases selected are shown below in Table 3.5.

Question eight and question nine were mapped to transformational learning phase one, a disorienting dilemma. Responses to these questions provided descriptions of the problems students may be experiencing with university study and represented a disorienting dilemma where students are faced with a new experience that cannot be made sense of or fully explained from their existing attitudes, values and beliefs.

Table 3.5

Transformational learning phases selected for interview questions

| | Phase | Description |
|---|-------|------------------------------------------------------|
| 1 | | A disorienting dilemma. |
| 3 | | A critical assessment of psychological, socio- |
| | | cultural or epistemic assumptions |
| 4 | | Recognition that one's discontent and the process of |
| | | transformation are shared and that others have |
| | | negotiated a similar change |
| 5 | | Exploration of options for new roles, relationships |
| | | and actions |
| 6 | | Planning a course of action |

Question two, question three, question four and question six were mapped to phase three, a critical reflection of psychological, socio-cultural or epistemic assumptions (Mezirow, 1991). This phase was chosen for these questions since 'what' questions require students to reflect on the values that they believe are characteristic of their identity and promote reflection in the psychological domain. Asking 'how' questions require students to reflect on the socio-cultural values that have formed their psychological assumptions.

Question 10, was mapped to phase four, recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change. Responses to this question provided insight into how a student perceived their own experience and the extent to which they perceived that other students experience was similar to their own. The understanding that others experience is similar to ones own provided a basis for discourse and exchange of problem solving strategies.

Question one and questions seven were mapped to phase five, exploration of options for new roles, relationships and actions. Responses to these questions provided insight into the students' interpretations of the role they are preparing themselves for by undertaking first year study and the relationships and actions they believe are consistent with that role.

Question 11 and question 12 were mapped to phase six, planning a course of action. Responses to these questions yielded valuable insight into students experience of developing a plan for dealing with their problem and through the process of consideration of alternatives how they may plan for other courses of action and their preparedness to do so should a need arise.

Each interview was given a unique identifying number, and each code, process and memo developed using the line-by-line process was uniquely identified with an alphanumeric code that permitted ease of cross referencing responses and ensured a consistent interpretation of responses. Initial coding was done by hand and later transcribed to MS WordTM for ease of searching using the navigation feature. Identified codes and processes were then grouped into core categories that provided answers to each interview question.

Procedure

Survey

The survey questions were written using QualtrixTM online survey software and the link to the survey was made available to students during their Information and Communications Technology classes. ICT staff members were asked to inform students that a survey was available and permit students time to complete the survey

during their classes. ICT staff members were provided with the hyperlink to the survey and made the link available to students who wished to partake in the survey. The distribution and collection of the survey results complied fully with university ethics requirements. The survey also included an invitation for students to participate in case study interviews by writing their email address in the space provided.

Interviews

The 17 students who provided their email address were contacted to arrange a time for an interview, however only 11 students attended the interviews. If they could not afford the time to take part in an interview of approximately 30 minutes duration they were given the options of either conducting the interview by telephone or, if they requested, they were emailed the interview questions. Their completed interviews were returned by email. Whether the interview was conducted face-to-face, by telephone or email all students taking part were also given a cover letter describing the purpose of the interview and provided contact details for the chief investigator and the human ethics officer of the university. Additionally all students who took part in the interviews were also provided with a consent form, which they signed to indicate they had agreed to be interviewed. These procedures complied with university ethics requirements for research. The interviews were conducted in weeks three and four of semester one 2012.

Limitations of the Study

Limitations include:

- The researcher's interpretation of interview data.
- The need to operate within a small interview sample size of 11 students.

The operational definition of the study will be based on transformation of meaning schemes (Mezirow, 1991) as the indicator that transformational learning has occurred.

Research Questions

The data obtained from the survey and the interviews conducted in the current study support the development of answers to the following research questions.

- 1. How do pre-service teachers experience their first year at higher education?
- 2. What evidence of transformational learning exists for first year education students engaged in a university undergraduate degree?
- 3. To what extent can a model for transformative learning apply to first year university education?

Summary

The mixed methods research methodology adopted in the current study accommodated the use of quantitative and qualitative analyses, to reveal elements of the students' lifeworlds prior to their commencing university study and the changes in their lifeworlds as they adapt to a new learning environment. Mapping of questions to phases of transformational learning (Benson et al., 2014; Mezirow, 1991; Snyder, 2008) permitted identification of transformative experiences as students undertook their course of study. Data gathered from the interviews and questionnaires are presented as findings in Chapter Four. There was no evidence that the method by which students responded, F2F, Email or Telephone, revealed any significant differences in responses. By contrast, student responses were consistent for the three different methods of response.

Chapter 4 - Findings

This chapter is presented in two parts. Part A reports the findings from the three sections that comprised the survey. Part B reports the findings from the student interviews. The responses to the demographic questions of students surveyed are presented below and provided information about the lifeworld of pre-service teachers, while section two of the survey provided data about the nature of transformational learning experienced during the period of adaptation to the university style of teaching. Survey responses were analysed using QualtrixTM software. Pearson coefficients were calculated using SPSSTM. Case study interview responses, including student vignettes, were also analysed for students' experiences of their study using line-by-line coding (Charmaz, 2006).

Part A: Section One - Survey Responses

The ages of students and the percentage of the cohort each age group represents, as at the beginning of semester one 2012, are shown in Table 4.1. The responses to questions in section one of the survey were analysed using simple frequency analysis using QualtrixTM online software.

Age in Years of Students

Table 4.1

| Age in Years | Percentage of Cohort (n =72) |
|--------------|------------------------------|
| 18 | 22.2 |
| 19 | 22.2 |
| 20 | 11.2 |
| 21-30 | 25 |
| 31-40 | 11.1 |
| 41-50 | 5.5 |
| 51 and over | 2.8 |

Persons aged 18 years and older are regarded as being adults, are eligible to vote, drive a motor vehicle and consume alcohol. While the whole cohort was, therefore, regarded as adult, those below the age of 21 years were most typically representative of school leavers. For the purpose of distinguishing this group from non-school leavers the age for mature age students has been adopted as 21 years and older. This

approach revealed that 41.4% of the cohort surveyed was composed of mature age entrants.

The difficulties facing mature age students included the need to work to meet financial commitments, relationship and parenting responsibilities; while school leavers typically did some paid work to gain a level of financial independence from their families (James et al., 2010).

Prior Education

Of the respondents surveyed (n=72), 35 completed Year 12, representing 48.6% of the population. Those students, therefore, can be considered as having the basic numeracy and literacy skills required for first year undergraduate study. The remaining 51.4% represented a diverse range of prior educational experience and achievements. Prior levels of education have been identified in previous research (Hamlett, 2010; Hillman, 2005; James et al., 2010; McInnis & James, 1995; McInnis, 2001) as significant in the extent to which they prepare students for first year undergraduate study.

Table 4.2

Levels of Prior Education

| Completed | TAFE Cert | TAFE Cert | TAFE | University | University | Other |
|-----------|-----------|-----------|---------|-------------|------------|-------|
| Year 12 | III | IV | Diploma | Preparation | | |
| | | | | Course | | |
| 50% | 4.3% | 8.6% | 10% | 10% | 8.6% | 8.6% |

The figures shown in Table 4.2 reveal that only 18.6% of the cohort had some experience of university education through prior undergraduate study or through the university preparation course (UPC). Therefore, 81.4% of first year entrants, those with no prior experience of learning at a university were not well prepared for undergraduate study (Brinkworth et al., 2009; Crisp et al., 2009; Gravett and Petersen, 2002; Hamlett, 2010; Hillman, 2005; Krause 2011; Lizzio & Wilson, 2005, Scutter et al., 2011).

Paid work

The results of the current study showed that a total of 52 B.Ed-P students reported working from less than five hours per week to between 35 and 40 hours per week. This represents 72.2% (n=72) of the cohort surveyed. Students working between 15 and 30 hours per week represented 35% (n=72) of the cohort. These figures are shown in Table 4.3.

Table 4.3

Hours Spent in Paid Employment

| Less than 5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 35-40 | More |
|-------------|-------|-------|-------|-------|-------|-------|--------|
| hours | hours | hours | hours | hours | hours | hours | than40 |
| | | | | | | | hours |
| 8% | 29% | 27% | 23% | 8% | 4% | 2% | 0%- |

Students who work more than 16 hours per week are more likely to experience difficulty managing their paid employment and the responsibilities of undertaking full time study. The extent to which financial issues are a significant concern for many first year students are evident from the survey results obtained in the current study that showed 35% of students undertake some sort of paid work between 15 and 30 hours per week. The requirement to work this many hours placed them in a situation where accommodating paid work requirements with study time requirements was difficult and represented a situation that placed them at risk of academic failure in their first year of study (Crisp et al., 2009; James et al., 2010; Krause, 2011).

The time that students spend in private study was reported from the 2009 first year experience questionnaire to be 10.6 hours per week (James et al., 2010). This figure when added to the time spent in paid work for 35% of students, represented between 25.6 hours and 40.6 hours per week. With an on campus attendance requirement of 12 hours per week this group of first year students was, therefore, spending between 37.6 hours and 52.6 hours per week to meet their part time financial commitments and their full time study commitments. This amount of time exceeded the national 37.5 hour working week. Students were clearly disadvantaged financially compared to their full time employed counterparts (Zepke, 2014).

The impact this had on students' efforts to adapt to the study requirements of their course was a contributory factor in their reported feelings of being overwhelmed, dealing with a course workload that was too heavy and difficulty keeping up with the volume of work in the course (Northedge, 2003; O'Shea, 2011).

Travel time, vehicle use and child care

The time taken to travel from home to university was reported as between 10 and 30 minutes for 69% of respondents, with 31% travelling 40 minutes or more resulting in a round trip time of between 20 and 60 minutes. For 11% of respondents the journey was longer than 60 minutes resulting in a round trip in excess of two hours. This represented time that was not available for study.

With 17% of students reporting they use public transport and 83% use their own transport, fares and costs of running a vehicle may contribute to the need to undertake some form of paid work, further exacerbating the problems associated with accommodating study time with financial commitments. Fifteen percent of students indicated they needed to arrange childcare in order to undertake this course. As parents, these students faced a greater demand on their time away from university than students who were not parents. The responsibilities of parenting represented a further source of time not available for study.

Underrepresented groups

Of the students surveyed in the current study, 42% reported being the first member in their family to attend university. For this group of students, first year learning at a university required them to address far more than simply absorbing academic content in order to be able to pass assessments and engage with the community of learning. Rather, the act of learning is one of effectively managing their limited time as a result of dealing with whole of life responsibilities, in order to incorporate the time requirements of study (Crosling et al., 2009; James et al., 2010; Walker-Gibbs, 2008).

Access to information and communications technology

Student access to information and communications technology (ICT) was a significant factor in first year study as lectures and course materials are available

online, thereby providing students with access to course materials both on campus and via the internet. Of the students surveyed, 99% reported they had access to a computer where they live, while 97% also had access to a high speed broadband internet connection. A further 85% reported having access to a quiet study space. Access to ICT is, therefore, not a limiting factor that could impact students' abilities to access study materials or complete online assessments from home. This finding further suggests that students from underrepresented groups have access to ICT and that ICT access is not a significant factor affecting first year study.

Section Two - Survey Responses

The questions in this section of the survey, question 19 to question 30 inclusive, measured academic orientation, student identity, academic application, and comprehending and coping. These questions were mapped to the phases of transformational learning (Appendix C) allowing exploration of the transformational learning experienced by commencing pre-service teachers. The responses revealed a diverse range of attitudes and engagement with the course material and provided valuable information about the changes in commencing pre-service teachers' lifeworlds as they adapted to the demands of first year study. While some B.Ed-P students found lectures stimulating and enjoyed studying others found the study workload difficult to deal with and experienced difficulties in managing their time. Establishing the lifeworld context for commencing pre-service teachers informs further exploration of the transformational aspects of their learning experience and the resulting changes in their lifeworld. The percentage responses for this set of questions are shown in Table 4.4.

Academic orientation

Academic orientation is a measure of the enjoyment students experienced from the intellectual challenge and level of satisfaction they derived from studying. The responses to question 19 show that 69.4% students found their interest in the subject was often stimulated by their lectures, with 20. 8% strongly agreeing and 8.4% mildly agreeing. For question 20 55.56% of students agreed that they enjoy the intellectual challenge of the subjects they are studying, with 19.4% strongly agreeing and 18.1% mildly agreeing. Responses to question 21 showed 26.4% of students agreed that they

obtained a lot of satisfaction from studying with 45.8% mildly agreeing. The responses to these questions showed that students experienced an intellectual challenge from the subjects they were studying, they derived satisfaction from their studies and that they found lectures stimulating. The response rate indicated that lectures remain a valuable form of presenting information and engaging students.

Table 4.4

Percentage Responses to Section Two of Survey

| Question | FYEQ | SD | D | MD | MA | A | SA |
|------------------------------|-------------|-------------------|-------------------|-------|-------|-------------------|-------------------|
| | Category | | | | | | |
| 19. The lectures often | Academic | | | | | | |
| stimulate my interest in | orientation | | | | | | |
| the subjects. | | 1.39 | | | 8.33 | 69.44 | 20.83 |
| 20. I enjoy the | Academic | | | | | | |
| intellectual challenge | orientation | | | | | | |
| of the subjects I am | | 1.39 | <mark>2.78</mark> | 2.78 | 18.06 | 55.56 | 19.44 |
| studying. | | | | | | | |
| 21. I get a lot of | Academic | | | | | | |
| satisfaction from | orientation | 1.39 | 2.78 | 12.50 | 45.83 | 26.39 | 11.11 |
| studying. | | | | | | | |
| 22. I really like being a | Student | | | | | | |
| university student. | identity | | 2.78 | 1.39 | 25.00 | 37.50 | 33.33 |
| 23. University hasn't | Student | | | | | | |
| lived up to my | identity | 16.67 | 38.89 | 22.22 | 13.89 | <mark>6.94</mark> | 1.39 |
| expectations. | | | | | | | |
| 24. I find it difficult to | Academic | | | | | | |
| get myself motivated to | application | 1.39 | 13.89 | 13.89 | 41.67 | 18.06 | 11.11 |
| study. | | | | | | | |
| 25. I regularly seek the | Academic | | | | | | |
| advice and assistance of | application | | | | | | |
| the teaching staff. | | 2.78 | 18.06 | 27.78 | 36.11 | 13.89 | 1.39 |
| 26. I find it really hard to | Comprehend | | | | | | |
| keep up with the volume | ing | | | | | | |
| of work in this course. | and coping | <mark>2.78</mark> | 18.06 | 19.44 | 34.72 | 18.06 | <mark>6.94</mark> |
| 27. I feel overwhelmed | Comprehend | | | | | | |
| by all I have to do. | ing and | 2.78 | <mark>4.17</mark> | 13.89 | 25.00 | 34.72 | 19.44 |
| | coping | | | | | | |
| 28. My course workload | Comprehend | | | | | | |
| is too heavy. | ing | 1.39 | 19.44 | 33.33 | 29.17 | 12.50 | 2.78 |
| | and coping | | | | | | |
| 29. I find it difficult to | Comprehend | | | | | | |
| comprehend a lot of the | ing | | | | | | |
| material I am supposed | and coping | | | | | | |
| to study. | 1 0 | 4.17 | 20.83 | 23.61 | 31.94 | 12.50 | <mark>6.94</mark> |

23.61 34.72 25.00 **5.56 1.39**

Numbers shown in grey represent 15% or more of responses.

The choice to make 15% of responses the cut off percentage, below which data would not be analysed was made on the hypothetical consideration that the School of Education may consider spending \$AU100, 000 to make changes to course curricula and teaching, learning or, assessment practice for equal to or more than 15% of the student population but would not be willing to spend that amount of money for less than 15% of the cohort. The exception to this theoretical limit was the small number of students 10% to 13% who were seeking academic help from support staff while 54% of students claimed they were overwhelmed by the academic workload. These results are presented in Table 4.9 along with discussion about this disturbing trend.

<mark>9.72</mark>

Student identity

Student identity measures sense of self in relation to aspects of being a university student. The two aspects measured are: really like being a university student and that university has not lived up to expectations. The responses to question 23 showed that 22% of students surveyed agreed that university had not lived up to their expectations. The lifeworld of commencing pre-service teachers is a multifaceted one and as such it is unlikely that just one facet thereof could account for students believing that university has not lived up to their expectations (Crosling et al., 2009; Walker-Gibbs, 2008; Zepke, 2014). However, student expectations of what student centred learning will be like are frequently very different to the reality of first year study (Brinkworth et al., 2009; Crosling et al., 2009; Hillman, 2005; Lizzio &Wilson, 2005; Scutter et al., 2011). Understanding the way in which students perceive that university has not lived up to their expectations will provide insight into the reasons why they are having difficulties adjusting to the university environment. The circumstances leading students to perceive that university has not lived up to their expectations will be explored further in Chapter Five - Discussions.

Academic application

Academic application measures students' behaviour and attitudes towards study as they adjust to the requirements of university study. Responses showed 18.1% of students agreed that they have difficulty in becoming motivated to study while 41.7% mildly agreed.

Comprehending and coping

Comprehending and coping are measures of how a student deals with the study workload and how she or he comprehends the material they are studying. In response to question 26: I find it really hard to keep up with the volume of work in this course, 34.7% mildly agreed with 18.1% agreeing. This represents a total of 52.8% of students finding the course workload difficult to keep up with. Of significance here is the amount of paid work students undertake. The survey showed that 35% of students worked more than 15 hours per week. The impact this had on their study is reflected in their feeling of being overwhelmed, dealing with a course workload that is too heavy and difficulty keeping up with the volume of work in the course. Additional influences that can make coping and comprehending difficult arise from difficulty in adjusting to the university style of learning, difficulty becoming motivated to study and feeling they are isolated and do not fit in with the university community of learning (Arvanitakis, 2014; Krause, 2011; Paavola at al., 2004; O'Shea, 2011; Walker-Gibbs, 2008).

Final Section - Survey Responses

This section of the survey provided information on how students rated their relationship with other students and staff. Values are presented in Table 4.5 below. The relationship reported as most significant (average value = 5.03) was between students and their tutors.

Table 4.5

Student Relationships with Academic Teaching Staff, Academic Support Staff and Peers

| Questions | Minimum Value | Maximum Value | Average Value |
|-------------------------|---------------|---------------|---------------|
| Q 31. Other students | 2 | 6 | 4.6 |
| Q 32. Lecturers | 3 | 6 | 4.8 |
| Q 33. Tutors | 3 | 6 | 5.0 |
| Q 34. Learning advisors | 3 | 6 | 4.6 |

Only minor differences were reported for relationships with other students, lecturers and learning advisors. It is reasonable to expect that relationships with tutors would show the highest value, since students spend the greatest percentage of their class time with tutoring staff and tutorials typically have much smaller student numbers than lectures. Academic tutoring staff are therefore able to assign students to work on low value formative assessment tasks in groups of four or five students per group (Crosling et al., 2009; Krause, 2011). This allows students to receive rapid feedback, which is as important, if not more so as the academic content at this early stage of their learning journey. Small group work also affords students the opportunity to build networks with their peers. The need students have to find a place within the university learning environment is also an important social need that must be met before effective self directed learning can begin to take place (Brown et al., 1989; Crisp et al., 2009; Crosling et al., 2009; Einfalt & Turley, 2009; Habermas, 1984; Hillman, 2005; McKenzie & Schweitzer, 2001; O'Shea, 2011; Robertson, 1996; Walck & Hensby, 2003). The survey responses in the current study showed that students derived satisfaction from the intellectual challenge of studying at university. However, they also reported being overwhelmed by the study workload, experiencing difficulty in comprehending and coping with study materials and regarded that university had not lived up to their expectations.

Transformational Learning Phases Mapped to First Year Experience Categories

The transformational learning phases corresponding to the categories of academic orientation and student identity are presented in Table 4.6, while transformational elements corresponding with academic application, student identity and comprehending and coping are presented in Table 4.7. Within the comprehending and coping category several phases of transformational learning were identified and these are presented in Table 4.8.

In Table 4.6 a statistically significant correlation r = .469, n = 72, p = .01 is shown between question 20: I enjoy the intellectual challenge of subjects I am studying, phase nine and question 22: I really like being a university student, phase five. It is, therefore, inferred that the correlation r = .469 is also valid for phase five: exploration of options for new roles, relationships and actions and phase nine: building of confidence and competence in new roles and relationships. It can, therefore, be stated that 22% of the population (n = 72) experience phase five and phase nine of transformational learning. The above procedure has been used for all correlations presented in Tables 4.6, 4.7 and 4.8.

Reported at Risk of Academic Failure Behaviours

The findings reported in this section are indicative of behaviours that can lead to deferment or academic failure in first year study. Within the category of academic orientation responses to questions showed a significant correlation: r = .565, n = 72, p = .01 between question 19: the lecturers often stimulate my interest in the subjects and question 20: I enjoy the intellectual challenge of the subjects I am studying. This corresponds with transformational learning phase seven: acquisition of knowledge and skills for implementing one's plans, and phase nine: building of confidence and competence in new roles and relationships.

The correlation coefficient r = .565, when squared, applied to 31.6% of the population. Between the categories of academic orientation and student identity, there is a statistically significant correlation r = .469, n = 72, p = .01 between question 20: I enjoy the intellectual challenge of the subjects I am studying and question 22: I really

like being a university student. This corresponds with transformational learning phase nine: building of confidence and competence in new roles and relationships and phase five: exploration of options for new roles, relationships and actions. The correlation coefficient applied to 22% of the population. Building confidence and competence in new roles correlates with liking being a university student.

There is also a statistically significant correlation r = .420, n = 72, p = .01 between academic orientation and student identity as represented by question 21: I get a lot of satisfaction from studying, and question 22: I really like being a university student. This corresponds with phase eight: provision trying of new roles and phase five: exploration of options for new roles, relationships and actions, and applied to 17.64% of the population.

Table 4.6

Correlations between Transformational Learning, Academic Orientation and Student Identity

| Survey Question. | Correlating Survey Question. | Pearson Coefficient | Percentage of |
|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|
| Phase of Transformational | Mapped Phase of | | Population |
| Learning | Transformational Learning | | |
| Academic Orientation | Academic Orientation | | |
| Q20 I enjoy the intellectual challenge of subjects I am studying Phase 9 Building of new roles and relationships | Q19 The lecturers often stimulate my interest in the subjects. Phase 7 Acquisition of knowledge and skills for implementing ones plans | r = .565 n = 72 | 31.60% |
| Academic Orientation: | Student Identity: | | |
| Q20 I enjoy the intellectual challenge of subjects I am studying | Q22 I really like being a university student | r = .469 n = 72 | 22.0% |
| Phase 9 Building of new roles and relationships | Phase 5 Exploration of options for new roles, relationships and actions | | |

| Academic Orientation: | Student Identity: | | |
|-----------------------------------------------|-------------------------------------------------------------|----------|-------|
| Q21 I get a lot of satisfaction from studying | Q22 I really like being a university student | r = .420 | 17.6% |
| | | n = 72 | |
| Phase 8 Provision trying of new roles | Phase 5 Exploration of new roles, relationships and actions | | |
| | | | n= 01 |

Within the category of academic orientation the correlation between enjoyment of study and lectures being a source of stimulation applied to 31.6% of the population. Students who enjoyed the intellectual challenge of study also found that lectures stimulated their interest in the topic. Since these two questions were mapped to phases seven and nine of transformational learning, acquiring new skills and knowledge that can be used to further one's plans results in individuals being able to build their confidence in their new role as a university student. Acquisition of skills and knowledge for implementing one's plans correlates with building confidence in new roles and relationships.

The building of confidence in new roles correlates with exploring new roles and trying new roles. For new B.Ed-P students the building of confidence and acquisition of new skills and knowledge in a new role supports their further exploration of that role.

Transformational Learning, Academic Application, Student Identity and Comprehending and Coping

Academic application measures students' behaviour and attitudes towards study as they adjust to the university style of teaching, while comprehending and coping are measures of how a student deals with the study workload and how she or he comprehends the material they are studying.

For the categories of academic application and student identity, responses showed a statistically significant correlation r = .400, n = 72, p = .01 as reflected in the responses to question 23: university has not lived up to my expectations and question 24: I find it difficult to get myself motivated to study. This corresponds with

transformational learning phase one: a disorienting dilemma and phase two: self-examination with feeling of guilt or shame and applied to 16% of the population.

For the categories of academic application and comprehending and coping, responses showed a statistically significant correlation, r = .421, n = 72, p = .01 as reflected in the responses to question 24: I find it difficult to get myself motivated to study and question 28: my course workload is too heavy. This corresponds with transformational learning phase two: self-examination with feeling of guilt or shame and phase three: a critical assessment of epistemic, socio-cultural or psychological assumptions and applied to 17.2% of the population.

There was a statistically significant correlation r = .487, n = 72, p = .01, as reflected in the responses to question 24: I find it difficult to get myself motivated to study and question 30: I have had difficulty adjusting to the style of teaching at university. This corresponds with transformational learning phase two: self-examination with feeling of guilt or shame and phase one: a disorienting dilemma, and applied to 23.7% of the population.

Table 4.7

Correlations between Transformational Learning, Academic Application, Student Identity and Comprehending and Coping

| Survey Question | Correlating Survey Question | Pearson Correlations | Percentage of |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------------|
| Phase of Transformational Learning | Mapped Phase of Transformational Learning | | Population |
| Academic Application: | Comprehending and Coping: | | |
| Q24. I find it difficult to get myself motivated to study (2) Phase 2 Self-examination with feeling of guilt or shame | Q30. I have had difficulty adjusting to the style of teaching at university (1) Phase 1 A disorienting dilemma | r = .487 n = 72 | 23.7% |
| Academic Application: | Comprehending and Coping: | | |
| Q24. I find it difficult to get myself motivated to study (2) Phase 2 Self- examination with feeling of guilt or shame | Q29. I find it difficult to comprehend a lot of the material I am supposed to study (1) Phase 1 A disorienting dilemma | r = .487 n = 72 | 23.7% |

| Academic Application: | Student Identity: | r = .400 | 16.0% |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------|-------|
| Q24. I find it difficult to get myself motivated to study (2) Phase 2 Self- examination with feeling of guilt or shame | Q23. University has not lived up to my expectations (1) Phase 1 A disorienting dilemma | n = 72 | |
| Academic Application: | Comprehending and Coping: | | |
| Q24. I find it difficult to get myself motivated to | Q28. My course workload is too heavy (3) | r = .421 | 17.7% |
| study (2) Phase 2 Self- examination with feeling of guilt or shame | Phase 3 A critical assessment of epistemic, socio-cultural or psychological assumptions | n = 72 | |
| | | | n= 01 |

There was also a statistically significant correlation r = .487, n = 72, p = .01 as reflected in the responses to question 24: I find it difficult to get myself motivated to study and question 29: I find it difficult to comprehend a lot of the material I am supposed to study. This corresponds with transformational learning phase two: self-examination with feeling of guilt or shame and phase one: a disorienting dilemma and applied to 23.7% of the population.

The correlations discussed in this section indicate that students experienced study as a disorienting dilemma that led to self-examination, resulting in feelings of guilt or shame. The sources of that dilemma and associated self-examination were the course workload, difficulty getting motivated and difficulty understanding the course material. For 17.7% of the population this self-examination led to a critical assessment of epistemic, socio-cultural or psychological assumptions. A further 16.0% found it difficult to get motivated to study when university had not lived up to their expectations (James et al., 2010, Mezirow 1991).

Transformational Learning and Comprehending and Coping

Within the comprehending and coping category there were eight statistically significant correlations at the .01 level. The first three of these represented the highest correlations for any categories found in the study with r = .736, n = 72, p = .01 and r = .715, n = 72, p = .01 and r = .640, n = 72, p = .01, respectively. The first of these r = .736, n = 72, p = .01 occurred between question 26: I find it really hard to keep up

with the volume of work in this course and question 28: my course workload is too heavy. These correspond with transformational learning phase one: a disorienting dilemma and phase three: a critical assessment of epistemic, socio-cultural or psychological assumptions. This correlation applied to 54.2% of the population.

The second highest correlation of the study r = .715, n = 72, p = .01 occurred between question 29: I find it difficult to comprehend a lot of the material I am supposed to study and question 28: my course workload is too heavy

Table 4.8

Correlations between Transformational Learning and Comprehending and Coping

| Survey Question. | Correlating Survey | Pearson | Percentage |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------|------------|
| | Question. | | of |
| Phase of Transformational | | r value | Population |
| | Mapped Phase of | 1 varae | |
| Learning | Transformational | | |
| Dearming | Learning | | |
| Q26. I find it really hard to | Q28. My course workload is | | |
| keep up with the volume of | too heavy | | |
| work in this course | | r = .736 | 54.2% |
| | Phase 3 A critical | | |
| Phase 1 A disorienting | assessment of epistemic, | n = 72 | |
| dilemma | socio-cultural or | | |
| | psychological assumptions | | |
| comprehend a lot of the material I am supposed to study Phase 1 A disorienting dilemma | Phase 3 A critical assessment of epistemic, socio-cultural or psychological assumptions | n = 72 | |
| Q27. I feel overwhelmed by all I have to do | Q28. My course workload is too heavy | r = .640 n = 72 | 40.1% |
| Phase 2 Self-examination with feeling of guilt or shame | Phase 3 A critical assessment of epistemic, socio-cultural or psychological assumptions | | |

p=.01

The third highest correlation of the study r = .640, n = 72, p = .01 occurred between question 27: I feel overwhelmed by all I have to do and question 28: my course workload is too heavy. These correspond with transformational learning phase two: self-examination with feeling of guilt or shame and phase three: a critical assessment of epistemic, socio-cultural or psychological assumptions and applied to 40.9% of the population. These three highest correlations are shown in Table 4.8 The five remaining significant correlations are reported below and provide evidence of a trend between a disorienting dilemma and a critical assessment of assumptions on the part of the student.

The trend in correlation between transformational learning phase one: a disorienting dilemma and phase three: a critical assessment of epistemic, socio-cultural or psychological assumptions, is further evidenced by a statistically significant correlation r = .579, n = 72, p = .01 applying to 33.5% of the population, occurring between question 29: I find it difficult to comprehend a lot of the material I am supposed to study and 30: I have had difficulty adjusting to the style of teaching at university.

The trend continues with the statistically significant correlation r = .570, n = 72, p = .01 between question 30: I have had difficulty adjusting to the style of teaching at university and question 28: my course workload is too heavy and applied to 32.5% of the population. Finally for r = .390, n = 72, p = .01 applying to 15.2% of the population between 30: I have had difficulty adjusting to the style of teaching at university and question 23: university has not lived up to my expectations.

A statistically significant correlation r = .570, n = 72, p = .01 occurred between question 26: I find it really hard to keep up with the volume of work in this course and question 27: I feel overwhelmed by all I have to do, applying to 32.5% of the population. Also of significance r = .487, n = 72, p = .01 was the correlation between question 27: I feel overwhelmed by all I have to do and question 29: I find it difficult to comprehend a lot of the material I am supposed to study, applying to 23.7% of the population. Both of these correlations are represented by transformational learning phase two: self-examination with feeling of guilt or shame, and phase one: a disorienting dilemma.

In excess of 50% of the students surveyed report difficulty in comprehending the course material and that the course workload is too heavy. This can be represented using the phases of transformational learning as making a critical assessment following a disorienting dilemma. The correlation between phase one and phase three is also represented in university not living up to expectations, difficulty adjusting to the style of teaching at university and difficulty comprehending study material.

Relationships with staff and students

The responses provided for this section of the survey suggest that students believed they have good relationships with lecturers, tutors, learning advisors and other students. The mean for their relationship with tutors is slightly higher, 5.03, than for lecturers 4.78, learning advisors 4.64 and other students 4.58. This reflects the nature of the learning environment with tutors being the individuals who spend the largest amount of time with students.

The correlation between question 25: I regularly seek the advice of the teaching staff and question 26: I find it really hard to keep up with the volume of work in this course, shows a statistically significant correlation r = .330, n = 72, p = .01representing just 10.89% of the population. The remaining correlations between question 25 and question 27: I feel overwhelmed by all I have to do and question 28: My course workload is too heavy, reveal that less than 15% of students are actively seeking the help of teaching staff even though they are claiming they are overwhelmed and that the course workload is too heavy. Since the data was gathered in weeks two, three and four it is likely that students new to the university environment were still in the process of establishing relationships with academic teaching and support staff. Question 25 corresponds with academic application and the correlation with other questions in the comprehending and coping category suggests that while students claim to have good relationships with teaching staff they do not regularly approach teaching staff for assistance with study requirements. This is a further cause for concern given that over 50% of students have reported that they are finding it hard to keep up, that they are having difficulty comprehending the study material and that they believe the course workload is too heavy.

Since question 25 has been mapped to phase five of transformational learning, exploration of options for new roles relationships and actions, the responses suggest that this process is not as significant for them as dealing with a disorienting dilemma, self-assessment and critical assessment of psychological, socio-cultural and epistemic assumptions as evidenced by their being overwhelmed by the workload, comprehending the study material and keeping up with the study workload. It is noted that students expressed these points of view before having engaged with a full semester of study.

Seeking Help

The correlations shown in Table 4.9 raise important considerations for how students take advantage of academic assistance. While extensive study and academic help is available for students the figures in Table 4.9 reveal that between only 10% and 13% of students seek assistance with their academic study problems. Comparing the figures in Table 4.9 and Table 4.10 reveals a concerning problem of comprehending and coping experienced by students. This concern is heightened when the extensive level of academic study help provided is considered. It would appear that while help is available the students who need it most are not taking advantage of it.

Responses to questions 19 and 20 within the categories of academic orientation and student identity revealed that phase nine; building of self-confidence and competence in new roles and relationships and phase seven; acquisition of knowledge and skills for implementing ones plans were transformational experiences for some students. While students experienced first year study as a disorienting dilemma generating self-assessment and critical reflection, they also experienced elements of study as a way to build self-confidence and equip themselves with the knowledge and skills to implement their plans.

Clearly the options that study provides for them in the future when they graduate are highly valued. These options include the choice of a good career and the ability to cope with complex situations through gaining knowledge and skills. There is also evidence for phase five, exploration of options for new roles relationships and actions. These roles are centred on the identity of being a university student and the socialisation skills and opportunities presented by being a member of a new student

centred learning community. The findings of this section of the survey are presented in Table 4.9

Less than 30% of students derive intellectual satisfaction from their study, enjoy being a university student and experience a degree of stimulation from attending their lectures. The findings presented in Table 4.10 offer a possible explanation to why so few students take advantage of the academic help available to them.

Table 4.9

Percentage of Students Seeking Academic Help

| Survey Question | Correlating Survey Question | Pearson | Percentage of |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------|---------------|
| Phase of Transformational Learning | Mapped Phase of Transformational Learning | r value | Population |
| Q25 I regularly seek the advice and assistance of the teaching staff | Q26 I find it really hard to keep up with the volume of work in this course | r = .330 | 10.89% |
| Phase 5 Exploration of options for new roles, relationships and actions | Phase 1 A disorienting dilemma | n = 72 | |
| Q25 I regularly seek the advice and assistance of the teaching staff | Q27 I feel overwhelmed by all I have to do | r = .365 | 13.32% |
| Phase 5 Exploration of options for new roles, relationships and actions | Self-examination with feeling of guilt or shame | n = 72 | |
| Q25 I regularly seek the advice and assistance of the | Q28 My course workload is too heavy | r = .319 | 10.18% |
| teaching staff | | n = 72 | |
| Phase 5 Exploration of options for new roles, relationships and actions | Phase 3 A critical assessment of epistemic, socio-cultural or psychological assumptions | | |

Table 4.10 displays the percentages of students experiencing difficulty with comprehending and coping with the course study material. Over 50% of students experienced their first four weeks of university study as a disorienting dilemma. This had the effect of causing them to critically review their lifeworld values comprised of psychological, socio-cultural or epistemic assumptions. Less than 30% of students derive intellectual satisfaction from their study, enjoy being a university student and experience a degree of stimulation from attending their lectures. The findings presented in Table 4.10 offer a possible explanation to why so few students take advantage of the academic help available to them. Their experiences of lacking stimulation, not obtaining intellectual satisfaction from lectures, and not enjoying being a university student suggest that they are disinterested or so overwhelmed by course workload that they lack the motivation to improve their present position.

Table 4.10

Percentages of Students Reporting at Risk Behaviours

| Correlation | FYEQ Category | Phases of Transformational Learning | Percentage of Population |
|-------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Workload too heavy. Difficulty comprehending. Hard to keep up | Comprehending and Coping | A disorienting dilemma. A critical assessment of epistemic, socio-cultural or psychological assumptions | Over 50 % |
| Feeling overwhelmed by workload. Workload too heavy | Comprehending and Coping | A disorienting dilemma Self-examination with feelings of guilt or shame | 40-50 % |
| Difficulty comprehending study material. Hard to keep up. Difficulty adjusting to university teaching | Comprehending and Coping | A disorienting dilemma. Self-examination with feelings of guilt or shame. A critical assessment of epistemic, socio-cultural or psychological assumptions | 30-40 % |

p = .01

These results have also been noted by (James et al; 2010). This may have resulted in them feeling they did not belong to the university community and as a consequence they may have felt alienated or felt as though they were outsiders. (Crosling et al., 2009; Krauss, 2011; Lizzio & Wilson, 2005; Northedge, 2003; O'Shea, 2011; Paavola et al, 2004; Walker-Gibbs, 2008).

Part B: Interview Findings

A detailed investigation into students' experiences is presented in this section. Extensive use of student vignettes provides a contextual method of capturing the experiences of students.

The Student Experience

A detailed line-by-line coding of all interview responses is presented in Appendix D. The findings from this coding were used to develop six case studies written in narrative form to provide the reader with a detailed picture of student experience. B.Ed-P student interview responses provided an insight into the lifeworld of semester one 2012, undergraduate students and their experiences of first year study. Their interview responses supported the findings obtained from the survey analysis that students were having difficulty coping with the study workload, meeting financial and personal commitments while studying and lacked the time management skills necessary to effectively combine study with other commitments. Additionally, the case studies also provided information about the transformational nature of the first year experience and how students adapted to it as they engaged with the act of being a first year student.

Personal Experiences of First Year Study

Alan's story

The first interview is that of a mature aged man named Alan who decided that he wanted to become a school teacher and gave up a small business in order to undertake pre-service teacher education. As a result of his decision he and his wife are now dependent on his wife's income during his course of study. This represents a

significant financial loss for Alan and his wife. Alan expressed his motives for studying at university as wanting:

Alan: To do a teacher's course. I feel I could contribute and it would be fun. My wife is a teacher and I love kids. I coached my own kids in football and basketball. There are not a lot of males in primary teaching and I might encourage other blokes to do it as well.

The role of being a teacher was seen as one where the opportunity exists to work in an area that can provide enjoyment with additional benefits where one can make a contribution and be a role model for other mature age males. Family attitude to his study, while initially being sceptical, based on consideration of his age, became one of believing he would do well. His wife was very supportive bringing in the income during this stage.

Alan: Very supportive. My age was an initial shock to them but they believe I will do well. My wife is very supportive bringing in the income while I do this.

The influence of family attitudes on Alan's decision to become a teacher was found in the fact that his wife and brother are both teachers and supported his decision. Their support led him to believe that his decision was the correct one for him to make. Additionally, his experience as a single father, prior to his current marriage, caring for two young children was a source of personal conviction that he wanted to teach primary school children.

Alan: My brother and wife are teachers and they support me and it makes me think I am on the right track with my decision to study. I was a single dad with two children aged 4 months and 6 years and this gave me a better relationship with my children than most dads. This was a big influence on my decision to teach primary children.

Alan was confident that teaching primary children was the type of work he believed he would be good at and expressed a strong desire to be a good male role model for primary school children. This belief is one consistent with his earlier statement that he believed being a role model for other males was something that being a primary teacher would allow him to do. Together with his desire to be a good male role model for primary students, it is clear that being a role model is for Alan a core personal value that led him to decide to undertake a teaching degree.

Alan: When teaching primary students I want to be able to make it fun and entertaining in the class room environment and I want to make a good impression as a male role model for students.

Alan saw himself as being a teacher in five years' time in a primary school and hoped to be enjoying it and to be good at it. He was confident in his own ability to deal with the academic requirements of study, but was very concerned about being able to meet his mortgage repayments due to reduced financial income. His biggest concern was his uncertainty about his ability to cope with the study load and meet his financial commitments.

Alan: I am very confident in regard to my ability. I do have financial concerns though as I have a mortgage and I have been running a small business. My biggest concern is will I be able to cope with study and meet my financial commitments?

Alan's personal commitment to achieving his goal of being a teacher was clearly strong and represented his belief in his abilities to get there, and the value he placed on being a male role model for both other males who might consider being a primary teacher and primary school children. When considering alternatives if he was not able to succeed at being a teacher, part time study was not an option due to his age.

Alan: Open to other options if I can't make it. Time is a factor. I don't want to have to spend 8 to 10 years doing it

part time. I would not be a teacher's aide, I want to be a teacher. If I looked at counselling it would probably be with older kids. I would consider other things if and when the need arises.

He also had no desire to be a teacher's aide, but was prepared to consider a counselling role although he believed this probably would involve working with older children. However, he was quite clear that he would consider alternatives if and when the need arose and is a further indication of his personal commitment to succeed at becoming a teacher.

Alan reported several problems he was experiencing with studying. Referencing was a problem for him, but he was learning as he was going. He also had difficulty finding books in the library and knowing which areas to concentrate his efforts on in terms of texts and prescribed readings. He found that the online library service was good, but expressed difficulty being able to prioritise the things he needed to do. These problems may be considered from two perspectives. The referencing problem is an academic one while the use of the library and prioritising reading tasks are process oriented problems arising from the need for a new student to acculturate themselves with the broader university community and how to use the resources available to them.

Alan reported that prioritising study requirements was his biggest problem as it was hard to work out what texts and readings he should read first and which he could read later. His concern with this issue was that he may be wasting time reading material that was not essential to the task at hand. His concern with wasting time is understandable in light of his concerns about his ability to prioritise study tasks and finding time to balance study and financial commitments.

Alan: Prioritising study is the biggest problem. It is hard to work out what to read first. I make reading lists and they help but it is hard to know if this is enough, I ask myself should I be spending time right now reading books that end up being a waste of time.

Alan was not aware of other students experiencing similar problems as he did not have a network of friends. While he worked on assignments with a group of female students he did not discuss problems with them as he felt the age gap.

Alan: I don't have a network of friends here at the moment. I work with a few girls at the moment doing assignments but I really don't talk about these problems with them. I feel the age gap.

Alan's plan for dealing with these problems was to concentrate on what he was directed to do for readings and assignments and to maintain his focus. He believed that as time went on he would become more adept in managing study requirements, but was currently trying not to panic as a result of the problems he was experiencing with prioritising study skills and requirements.

However, while acknowledging the problems he was having he believed he did have the skills to successfully deal with them due to his maturity, which indicates that his confidence to succeed is based in prior life experiences that constitute his lifeworld. This is further reflected in his response that the new phase of anything takes time to get used to and that the process of getting used to something requires observing the processes at work in any new situation and then adapting to them. This response is consistent with phase six of transformational learning; planning a new course of action. For Alan planning a new course of action that will allow him to overcome the study problems he was having involved first observing the situation and then adapting to it or acting on it.

Alan: I think so. I have maturity on my side. The new phase of anything requires time to get used to. I think it is important to observe how things operate and adapt to it.

Alan believed he would adapt to the requirements of the study load and that he would succeed at becoming a teacher.

Anna's story

Anna is a mature age woman with four children, one of whom is disabled and requires on-going medical support. She recently separated from her partner and was waiting on a property settlement at the time of the interview. Her motive for enrolling in an education degree was to enable her to make more money than she was able to at present. She was unable to meet her financial commitments on her present income and believed that getting a degree would allow her to get a job where she could make more money than she was and have time to spend with her children.

Anna: I want to be able to earn \$60,000 a year and have time off for my children. I have a disabled child and three other children. Thirty thousand dollars a year doesn't go far enough.

Her family's attitude to her studying was reserved and she described it as a little bemused. She thought that they did not think she would complete the course and her 14 year old daughter did not want to be at university at the same time as her. Her daughter had thought the situation through and considered that there was a possibility that when she goes to university her mother may still be there and this did not please her. Anna was in a situation where attending university offered her a chance to improve her financial standing despite of the low level of family support she described. This is in contrast to Alan's family's clearly supportive attitude to his studying. The difference in family attitude may be seen in terms of the different lifestyles that Alan and Anna lived. Alan was married and his wife was bringing in the income while he studied. Anna had no one to support her financially and this was both a cause of concern to her and her motivation for attending university.

Anna: A little bemused. I don't think they think I will stick it out. My 14 year old daughter does not want to be at university at the same time as me.

Anna was very determined that she would complete the course despite her family's reservations. She was very focussed on financial concerns and considered these as her most pressing problem and one that she was going to deal with. She did not want to

be in the same position when her disabled son left school that she was at the time of the interview. She believed she would be good at working with disabled children and saw herself working at a school for the disabled in five years' time.

Anna: Only that I am very determined. I am not going to do it hard when my son leaves school.

She described herself as "pretty confident" of being able to reach her goal of teaching the disabled. She was not open to alternative viewpoints. She believed that her course of action in being a university student would lead her to more secure and better paid employment and was for her a matter of survival.

Anna: A matter of survival. I can't afford to not succeed at this.

For Anna her attitudes to where she wants to be in five years' time and how she planned to get there are representative of phase three of transformational learning; a critical assessment of psychological, socio-cultural or epistemic assumptions. Anna's self-confidence and determination that she can succeed at her completing her degree constitute psychological assumptions, those attitudes and beliefs which define her. In the socio-cultural context her assumptions are based on the belief that better paid and more secure employment will improve her financial standing within the community and provide her with a better quality of life than she currently has. Reflection on epistemic assumptions occurs for Anna in her stated confidence and determination as assumptions about herself that she believes to be valid.

Anna reported several problems she was experiencing with her study. The first of these was that she needed to cut back from four units to three units as she had to get part time work to help meet her financial responsibilities. She was also having trouble managing her time so that she could accommodate parenting, working and studying effectively.

The third problem that Anna described in relation to her study was that of hidden costs, costs she was not told of before she enrolled. These included the cost of books, the cost of a badge she has to wear while on practicum, the cost of an interactive

program that requires a headset and a USB memory stick. She was very annoyed that she had not been told of these costs earlier and had to ask her father to pay for them.

Anna: Time management and fitting everything in. The cost of books which is hidden but my father paid for these. I have to buy a \$25 badge to wear on practicum and an interactive program that costs \$33. I also have to have a headset and a USB memory stick. For kids this might be OK as their parents will likely pay.

Anna was aware of another mature age female student who was very annoyed at being told she would have to spend more money to purchase items necessary for her studies. This is representative of transformational learning phase four; a recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change. Anna clearly recognised that her discontent was shared by another student and believed that they shared a common problem. She also believed that mature age students had to support one another, which suggested that Anna saw being a mature age student as something that placed her and other mature age students at a disadvantage compared to the younger students who were school leavers. This attitude is also reflected in her comment that additional cost might be okay for kids as their parents would pay.

Anna's plan for dealing with these problems was to arrange to pay her utility bills in instalments. She did not indicate that she had any sort of plan for dealing with the study workload. It would seem that Anna's prime concerns are financial and that if she can solve or reduce these then she will have more time to devote to managing her time effectively. Anna's responses have consistently shown that she is very determined to succeed at university and that her main motive is to improve her financial position. Her determination is again evident as her response to the last interview question of do you have the skills to implement a solution to these problems shows.

Anna: I think so. Being determined is the key skill.

Anna believed that her determination would allow her to successfully complete her studies even though she had reduced to part time study in order to look for paid work.

Brian's story

Brian is a mature age male student with a family of his own. He worked in the banking sector as a trainer for ten years and while this provided him with a reliable financial income it did not provide him with an opportunity to advance. His motives for study at university were to enable him to become a member of a profession that he believed would offer him the chance to progress his career and at the same time allow him to make a contribution by working with children.

Brian: I have a training background in banking but felt I was not advancing. I am better suited to work with children.

I believe I can make a contribution by working with children.

While Brian's family showed some support for his decision to return to study they had reservations about his decision as they were concerned with that fact that he had not completed a previous course and that he had given up a job of 10 years in order to undertake study. This concern was expressed as scepticism that he had made a good decision in deciding to undertake study with a view to being able to work in a more rewarding career than he had been. The influence of his family's reservations was to cause Brian to doubt that he had made the correct decision and resulted in him feeling a great deal of anxiety as a result. However, he also regarded their views as a challenge or motivating factor to prove to them that their reservations were unfounded.

Brian: Has caused self-doubt and raised anxiety immensely. Also it is a motivating factor for me to prove my critics are wrong.

He believed the sort of work that he was best suited to was working with children in some capacity as a teacher, counsellor or mentor; as long as those positions allowed him to make a contribution. He did not specify the nature of the contribution he referred to, but it is likely given his prior job experience of feeling he was not advancing, that he sees working with children as a way of contributing his life experience and maturity towards the education and development of children. That

likelihood is also reflected in his desire to work in a mentoring or counselling role if he cannot work as a teacher. Those roles are traditionally seen as ones of supporting and inspiring others by contributing empathy and advice that can assist people to better cope with their problems. In five years' time Brian saw himself working in a school as a teacher, counsellor or mentor.

Brian was very confident of being able to achieve his goal due to his maturity, which he believed gave him self-confidence, and trust in his own abilities to know how to deal with problems and obstacles. He did not see things in black and white, rather he was prepared to consider alternate points of view should the need arise. This attitude is consistent with his beliefs in his own life experience that enable him to be confident about his own decisions even when his family members expressed scepticism at his decision to study.

Brian: Very confident. This is the benefit of experience, of being a mature age student, having more trust in myself to achieve. The benefit of life experience means I know how to address problems.

Brian's greatest problems with studying were time management and trying to balance study responsibilities with home life and parenting. Brian revealed that he was prone to depression and that anxiety was a trigger for depressive episodes. The problems he was experiencing with managing his time were a source of anxiety to him, but he coped with this by monitoring himself for signs of depression. He spoke confidently about his ability to manage depressive episodes in this way. This is yet another example of how Brian has been able to use his maturity and life experience to deal with problems confronting him and develop effective coping strategies. It also indicates that he would most likely develop a method of managing his time to avoid the anxiety he was currently feeling as the course progressed.

Brian: Time management leads to anxiety. I am careful not to let it trigger depressive episodes. I have to self-monitor to avoid becoming depressed.

Brian was aware of other students who were also experiencing time management problems and stated that some of the younger students he knew were also having difficulty prioritising their study workload. He was concerned that nobody had told him, or indeed told other students, of the workload associated with first year study. Had he been told of the amount of time he would have to find for private study, based on his own reported abilities to cope with situations, it is reasonable to expect that he would have been able to formulate a time management strategy prior to his studying and thus reduce the level of anxiety he experienced. However, under the existing circumstances he was forced to deal not only with the academic content of study, but also with finding time to accomplish it in an already busy life. The problem of time management has been reported regularly by students in the survey analysis conducted in this study and suggests that this is an area that universities need to look closely at if the experience of first year students is to be improved.

Brian: Yes, in regards to time management. Some of the younger ones are also struggling. We were not aware of the amount of work involved in studying.

Brian's plan of action for dealing with the problems he experienced had three main components. The first of these was his already stated ability to self-monitor to avoid depressive episodes. Secondly, his friends and family provided him with help in time management and goal setting. Despite his family's reservations about his decision to study their support for him was demonstrated by their preparedness to assist him with developing time management strategies. Thirdly, Brian sees a psychologist to assist him with anxiety and depression related issues. When these three sources of assistance are considered in totality it is clear that Brian has invested a great deal of time and thought into developing a coping strategy or strategies that have equipped him with the skills that will allow him to deal with the experience of being a first year student in a student centred learning environment. He believes he has the skills to help him solve the problems he was experiencing.

Brian: Yes I do, I know my weaknesses and have a range of strategies that I can use if I need them.

Brian believed his ability to develop strategies to cope with problems in life would allow him to develop strategies to better manage his time so that he could succeed with his studies.

Bridgette's story

Bridgette is a young female student who was passionate about becoming a teacher and saw teaching as a good career. Her motivation for undertaking study was to enable her to attain the job she spoke passionately about.

Bridgette: My motivation for studying at university is that I want to be able to have a good job. Teaching is my passion. Without going to university I wouldn't be able to follow my passion and become a teacher.

Her family was supportive of her studying and were proud that she was following her passion by studying to become a teacher. She was the second child in the family to attend university and she expressed the view that if she was happy with what she was doing then her family was happy for her. The views of her family shaped her own views by affirming their support for her chosen course of study. However, she pointed out that if they had not been happy with her decision she still would have enrolled to become a teacher. While family support was important to her she demonstrated her own determination that she would still have chosen this course even if her family hadn't approved. This was consistent with her earlier statement about following her passion as her main source of motivation to study.

Bridgette: Their views have helped shape my own in that I know they're there for me and support me. Obviously if they weren't happy with my attending uni this wouldn't affect my thoughts and thinking. But luckily I don't have to worry about that.

Bridgette believed she would be a very good teacher and had been inspired by her time at university so far. The passion with which she undertook her course of study is evident in her following comments.

Bridgette: I believe I would be good at primary school teaching. I have a passion for teaching and I really love little children. I love the moment when you see in their eyes when they realise they've understood something or accomplished something new. It's the most rewarding feeling. I want to be that teacher they remember for all the good reasons. A quote that was in my first lecture I will never forget "Children are born with wings, teachers help them fly". This quote is very true and inspires me.

In five years' time Bridgette saw herself as having graduated as a teacher and being in a full time job. While she was very stressed by the amount of work involved with study and assignments and saw her graduation as an event that was a long way in the distant future she was confident that she would succeed. Her response continued to show the level of passion she had for what she was doing.

Bridgette: At the moment being only in my third week at university I am very stressed with a lot of work and assignments piling up. That goal of graduating and being in a full time job seems very far away but I'm saying I am very confident I'll get there. I'm a very determined person and once I've set my mind to a challenge I don't normally back down.

Despite her passion she was clearly concerned about the volume of work she had to complete. She was not open to alternative points of view and wanted to graduate on time so she could commence working as soon as possible.

Bridgette's main problem with studying was the fact that it was a lot harder than she expected and this caused her a lot of stress. This is representative of transformational leaning phase one; a disorienting dilemma. For Bridgette the difficulty of the study she had to do and the stress it caused her qualifies the experience as a dilemma that had caused her some level of disorientation as she considered how best to deal with it. However, she believed that this was due to the fact that she was only in her third week of university study and that she would settle into a routine that allowed her to cope

with the workload. She was aware that most students she spoke with were also finding the workload hard to manage but that some were handling the stress better than she was.

Bridgette: In the short time I've been at university I've been able to make friends and speak with other people. We're all in the same boat so it's nice to talk to people that share the same home work load as myself. I have spoken to some people and I believe some people are managing life a little easier than I am. I tend to stress a lot. I find that others can manage situations better than I can. Although in saying that I've found a lot of people procrastinate as well.

Bridgette's plan for dealing with these problems was to seek specialist help with managing her stress and while she regarded at the time of the interview that she did not have the skills to deal with this on her own she was positive that she would be able to manage her stress in the near future as a result of seeking professional help.

Christine's story

Christine is a young female student whose motives for studying at university were to complete a degree so she could be a primary school teacher. She believed this would fulfil her ambition to be the best she can be. Christine is inspired by her family's support of her choice of career and valued the fact that they were proud of her and provided her with encouragement to keep going. While she clearly valued the support of her family it had no real impact on her own decision to be a teacher. Her father believed she was capable of doing more than being a teacher, but supported her choice in the end. This suggests that her father believed that there were ways to make a good living and obtain a good career other than being a teacher and that his daughter was capable of achieving them.

Christine: They would let me do whatever I want, so not really. I wouldn't listen to them if they wanted me to do something I didn't, so my view wouldn't change. Dad

thought I was a bit too smart to be doing it, but didn't argue with my choice in the end.

She believed she would be good at practical work with children as she was an organised and warm-hearted person. In five years' time she saw herself travelling to places where teachers were needed such as poor schooling environments that currently exist in India or Africa, but was aware that she may have to serve two years in a school in Australia before she travelled overseas to teach. This represents the transformational learning phase three; a critical assessment of psychological, socio-cultural or epistemic assumptions. For Christine this phase of transformation is represented in the psychological context by her belief in her abilities as an organised and warm-hearted person to be capable of working with children while the socio-cultural context is reflected in her desires to travel and be an educator in poor countries. The epistemic dimension to this reflection is found in Christine's determination to be a teacher, even though her father thought she could do more, indicating that her beliefs about her ability to succeed at being a teacher are for her valid.

Christine: Travelling to places where teachers are in need: for example in poor schooling environments in India or Africa. I think in 5 years' time I will have to do 2 years country work in a school (well not in the city from what I've heard).

Christine was confident of her ability to graduate and begin working as a teacher as she believed she could do anything she set her mind to. She was also prepared to be open to alternative suggestions and then decide whether or not to stay with her own opinion. This is representative of transformational learning phase five; exploration of options for new roles, relationships and actions. While being very determined to succeed at becoming a teacher, Christine's preparedness to consider alternate viewpoints suggests that should she not be able to complete her degree she has the ability to explore other roles that she could be successful at.

Christine: Most of the time, well at least I would listen to other people's viewpoints and kindly argue or reconsider mine.

The problems Christine had with her study included that of being overwhelmed by the workload resulting in her feeling stressed. Additionally, she had worked thirty hours that week due to a shortage of employees, which further stressed her when she just wanted to concentrate on study.

Finding money for books, public transport and food were also causes of stress for her. She was aware of other students having similar problems to her and being overwhelmed by the workload to the extent that it was causing them to think they were already so far behind that they could not catch up.

Christine: Every single student I know is feeling overwhelmed and we're already thinking negatively about being behind already. We're just being told about books to get then have to do a chapter of reading on the books we don't have and there's just a lot to do.

Again, students were overwhelmed by the study workload; both mature age and school leavers. In Christine's case there were financial concerns related to the cost of books, transport and food.

Christine's plan for dealing with these problems involved trying to save some money for fees and keep a slow but steady pace of study while hoping for the best. She was able to reduce her paid work hours to 10 hours per week leaving her more time for study albeit at the cost of a reduced income. While she didn't consider she had the skills to manage on reduced finances she did have good study skills which she acquired at her secondary school. However, she was very stressed by all the new study requirements she had to deal with. Realising that everyone else was experiencing the same problems with the study workload allayed her stress to some extent.

Christine: Not really. I'm not really good with money issues. My previous school embedded studying techniques into our brains so I know how to get stuff done but I stress out about all the new stuff I have to do with my studies. It's pretty 'demotivating' and I get a bit nervous. I was a bit scared but when I realized everyone was in the same boat I felt OK about it.

Christine's story represents the narrative of a young female as she negotiates her way through her university study. She experienced many of the same problems with study as other school leavers in terms of time management and dealing with the study workload. However, she also had financial problems such as cost of living, transport and food that were similar to mature age students.

Also in common with other school leavers and mature age students, Christine was aware of many other students having the same problems with studying as she was, however, for her this awareness was a source of relief in that she did not feel like the only one experiencing difficulties and this allayed some of the stress she was feeling.

Denise's story

Denise is a young female student whose motivation for studying at university is to get a degree. Unlike the students in other case studies she did not consider that being a teacher was what she wanted to be. She expressed the view that for her a degree was a way of expanding future opportunities rather than leading to a specific profession. She also saw completing a degree as an opportunity to pursue further study while deciding what she really wanted to do.

Denise: I really want to be able to say I have a degree and it gives me the opportunity to pursue further study in a topic I am interested in while still deciding what I want to be.

Denise's family, she believed, was happy about her decision to study, but she was not able to see them until April that year as they lived in England, so she wasn't sure. It

was always expected by her family that she would go to university and so she thought they would be happy about it.

Denise: It was always seen as something that was going to happen so now I have started university, I think they are very happy about it. I haven't seen them in quite a few months, before I applied, so I will find out exactly how happy when I see them in April.

The influence of her family has been significant as over the past two years she came to the conclusion that they were right in some respects to expect her to go to university. She completed high school two years ago, but did not enrol at university until now.

She realised that if she wanted to get where she wanted to be she had to do the same amount of study as everyone else. For her this was a major realisation that contributed to her motivation to start study. However, from her earlier statement it would seem she is keeping her options open by being focussed on getting a degree and not on just becoming a teacher.

Denise: For two years since leaving school and starting university now, I felt like I haven't done what I was supposed to and wouldn't be as successful as if I had gone straight there. I started to realise they were in some respects correct, and that I couldn't just expect to get wherever I wanted without studying for as long as everyone else.

Denise believed she would be good at a variety of jobs provided she was interested in them as this would inspire her to make the effort to do it well. She preferred hands on work rather than sitting at a desk and considered herself as a good people person so a job that involved a lot of communication would suit her. Again, she made no mention of teaching, counselling or mentoring and is clearly doing a course in education as a way of getting a degree rather than to be a teacher. However, her responses equally suggested that she may over the course of her study decide to be a teacher.

Denise: Something that covers a topic I am interested in so I have the intrinsic motivation to put 100% effort in. Something in which I can see I am making progress in and something that is more hands on than sitting at a desk all day. I think I am a good people person so it would need to involve a high degree of communication.

In five years' time Denise saw herself doing either a year of honours, working in a school in Australia or going back home to England. Again these multiple options of what she may actually do in five years' time are consistent with her motive for obtaining a degree being to explore an area she was interested in while she decided exactly what she wanted to do. While uncertain about where she wanted to be she was very confident she could achieve whatever goal she set her mind to.

Denise: Very confident I have learnt over the last year that if I want something enough I will find a way to make it happen.

She considered that she was definitely open to alternative views as her experience of being in Australia and studying at university was influenced by talking with other people and considering their ideas and suggestions.

Denise: Most definitely. I wouldn't be where I am (in Australia or university) if I hadn't seriously considered many different options, after talking to a wide variety of people all with different views.

Denise was experiencing time management problems with her study but has been able to solve these problems although she did not offer any information about what her plan for solving them was. There is however, a clue in response of her description of the problems when she mentioned she did not procrastinate too much. This suggests that her way of dealing with the problems was to simply get on with doing what she had to do. From her narrative so far it is reasonable to assume that Denise is a capable independent person who is prepared to listen to the advice of others and act on it if she so desired.

Denise: Time management but in the last couple of days I've managed to get on top of it and am now confident I know where I'm at and know how to stick to doing what I need to without procrastinating too much.

Denise was also aware of other students experiencing time management problems but considered that she had solved her own problems by the time she took part in the interview.

These responses are summarised in Table 4.11 on the following page.

Table 4.11

Core Responses to Interview Questions

| Interview Questions | Phase of Transformational | Core Responses from line- |
|--------------------------------------------------------------|--------------------------------------------------------|--------------------------------|
| | Learning | by-line coding. |
| 1. What are your motives for studying | 5. Exploration of options for new | Future Career (6). Family |
| at university? | roles, relationships and actions | Values (2).Personal Values (3) |
| 2. What do you think your family thinks | 3. A critical assessment of | Approving and supportive (9) |
| about you attending university? | psychological, socio-cultural or epistemic assumptions | Approving and concerned (2) |
| 3. How have their views shaped your | 3. A critical assessment of | Supported my own view (6). |
| own? | psychological, socio-cultural or | Caused me to reflect on my |
| | epistemic assumptions | own view (4). No effect (1) |
| 4 What sort of work do you believe | 3. A critical assessment of | Teaching (8). Working with |
| you would be good at? | psychological, socio-cultural or | children (3). |
| | epistemic assumptions | |
| 5. Where do you see yourself in five | 6. Planning a course of action | Teaching (9). Studying and |
| years' time? | | travelling (2) |
| 6. How confident are you of being able | 3. A critical assessment of | Very confident (6). Not |
| to get there? | psychological, socio-cultural or epistemic assumptions | confident (5) |
| 7. Are you open to alternative | 5. Exploration of options for new | Yes (5). Possibly (2). No (4) |
| viewpoints? | roles, relationships and actions | |
| 8. Are you experiencing any problems with university study? | 1. A disorienting dilemma | Yes (9). No (2) |
| 9. Could you tell me what the problems | 1. A disorienting dilemma | Adjusting to university (1). |
| are? | | Time management and |
| | | workload (7). Meeting |
| | | financial commitments (3) |
| 10. Are you aware of other students | 4. Recognition that one's discontent | Yes (10). Don't know (1) |
| experiencing the same problems you | and the process of transformation are | |
| are experiencing? | shared and that others have | |
| | negotiated a similar change | |
| 11. Do you have a plan of action for solving these problems? | 6. Planning a course of action | Yes (10). Not really(1) |
| 12. Do you have the skills to implement | 6. Planning a course of action | Yes (4). Think so (4). No (3) |
| a solution to your problems | | |

Numbers in brackets represent number of students for each response

Summary

Findings from the survey revealed that commencing pre-service teachers experience many difficulties adjusting to the first four weeks of university study. While they are motivated to succeed and graduate as teachers in order to obtain a good job they also face difficulties with comprehending and coping with the academic workload, poor time management skills, and the need to engage in paid employment. Additionally many have to arrange childcare in order to attend university and spend more than an hour travelling to and from campus.

The face-to-face interviews and case studies revealed that student's rate family support as important to their successful completion of the Bachelor of Education (Primary) Degree. However, their responses to the interview questions indicate they also face difficulties with poor time management skills, the academic work load, the need to engage in paid employment or live on a reduced income or be dependent on a spouse or partner to support them financially. They also have limited confidence in planning a course of action, and then implementing that action, to limit the problems they experience.

Mapping of the questions in section two of the survey and the interview questions to phases of transformational learning reveals that commencing university study is a transformative experience causing critical reflection of student views of what university study would be like, how they go about adapting to a new learning environment and how they identify themselves as learners in this environment.

A mixed methods study was important for the current research. The quantitative study provided demographic information about a student's life world and the values they brought with them to their first year of study. It allowed students to identify the areas of university study they believed important to them and their attitudes to their study.

The qualitative research provided rich descriptions from students themselves. Based on 12 questions the interview allowed students to express their feelings, hopes aspirations, confusion and doubt about how they saw their identity as a first year learner. By performing a detailed analysis of the students own words it was possible to identify various phases of transformational learning they were experiencing.

By far one of the greatest interview responses provided by students was the realisation that they were not alone in being overwhelmed by the academic workload and a realisation that many other students were experiencing the same difficulties.

Both the quantitative and qualitative methods provided the investigator with a keen insight as to the students' life world before they commenced study, and how their lifeworld in turn changed as they progressed through their study and interacted with peers and academic teaching staff. This change in a student's lifeworld as they engage in study is a central component of Mezirow's transformational learning allowing students to develop a more permeable and integrated view of the world around them (Mezirow, 1991).

The results of both the quantitave and qualitative research showed strong links between academic orientation, academic application, comprehending and coping and student identity (Krause, 2011; James et, al; 2010; O,Shea, 2011). These links provided a significant level of consistency in terms of how students responded to first year university study.

Chapter Five will discuss these findings in detail, focusing on the transformational learning experiences students undergo in engaging with university study.

Chapter 5 - Discussions

Commencing pre-service teachers report being highly motivated to succeed at their chosen goal of becoming a primary teacher. However, findings from the survey and face-to-face interviews conducted in the current study reveal that more than half of them have difficulties with comprehending and coping with the academic workload. B.Ed-P students experienced difficulties in comprehending and coping with the volume of study material and being able to find sufficient time to devote to their studies. A lack of time management skills was reported by both school leavers and mature age students. For school leavers, lack of time management skills was a source of concern that led them to doubt their ability to successfully complete first year study. Mature age students who believed they had the life skills and maturity to succeed with first year study, also believed that time management skills were the most significant issue facing them if they were to successfully integrate study requirements with other responsibilities in their lifeworld (James et al., 2010).

Additionally, they have difficulties with establishing their identity as a learner in the university environment, have to undertake paid employment to meet financial commitments, and have difficulty with planning and managing their time. The discussions presented in the current chapter will examine these difficulties in detail and identify the phases of transformational learning students experience as a result.

Survey Responses

Demands on students

First year B.Ed-P students frequently experience a disruption of their private and personal lives when they realise they will have to invest several hours of their own time, away from lectures and tutorials, if they are to be successful in their studies. Making adjustments to their lifestyle to accommodate hours of private study for many is not a requirement that they fully understood when they enrolled (McInnis, 2001; McInnis & James, 1995; Brinkworth et al. 2009; Crisp et al. 2009; O'Shea, 2011; Scutter, et al., 2011). This lack of understanding, reflected in their prior values,

presents them with an experience that requires them to change their attitudes and beliefs about the role of being a university student (Mezirow, 1991; O'Shea, 2011). Reorganising their personal life to adapt to the university student role requires they adopt new values that allow them to navigate their way through the learning experience and also incorporate that experience within their existing lifeworld (Benson, et al., 2014; Habermas, 1984; Crisp et al., 2009; Northedge, 2003; Mezirow, 1991, 2000; O'Shea, 2011). For many students this involves reducing time spent in social or family activities and for those students who have to undertake paid employment, reduction of the hours worked with the accompanying loss of income. The current study revealed that 37% of students undertook paid employment of 15 hours or more per week. This is a situation that moderately or severely interferes with study (James et al., 2010).

Mature age students

Mature age students have frequently not attended any formal context of education for several years. In the current study 47.4% of students were aged 21 years and older. Additionally they have financial responsibilities competing for the time they need to invest in private study (Benson, et al., 2014; Habermas, 1984; Crisp et al., 2009; Northedge, 2003; Mezirow, 1991, 2000; O'Shea, 2011). Students who have been working full time or running a small business find themselves having to accept reduced paid hours and as a consequence are dependent on a spouse or family member for financial support. Adapting to the university study environment requires students to participate in discussions with their student peers and academic teaching staff, to better understand how they can deal with the study workload, access online materials and prepare for assessments, within the community of learning existing in university education (O'Shea, 2011; Paavola et al, 2004). This will further restrict the time they have to return home to continue their private study and contribute in a limited fashion, to the help they are able to provide to those family members who are generating income or maintaining the operations of a small business.

The time taken for students to travel to the university campus for 69% of the cohort studied ranged between 10 minutes and 30 minutes, with 31% travelling 40 minutes or more. This resulted in round trip times, home to campus to home, of between 20

minutes and 80 minutes. While a 20 minute round trip is not a large amount of time, students travelling an hour or more have lost that period of potential study time. Furthermore, since 83% of students use their own transport for the journey to and from campus, this time cannot be utilised for reading a prescribed text or viewing a recorded lecture.

A further aspect for mature age students is that they typically require some time to familiarise themselves with the information and communication technologies (ICT) that characterise the university learning environment. However, all students in the current study reported having access to ICT and Internet connectivity where they live. Access to ICT then is not an issue, rather it is a situation where students face a learning curve in using ICT to familiarise themselves with the university online course materials available through BlackboardTM as well as enrolment procedures, course information, unit outlines, assessments and library resources.

Students who have to arrange childcare, 15% in the current study, in order to attend the course are also faced with time constraints as to how long they can afford to interact with their student peers. These students are required to pick up their children at a nominated time if they are using a fee for service childcare organisation and being late to collect their children will typically incur further charges. If, on the other hand, childcare is provided by a friend or relative being late to pick up their children, while not necessarily incurring a financial cost, may require the carers to provide meals for the children that may lead to friction between the parent and the carer.

Reflecting on the difficulties experienced in first year study

The difficulties mature age students find in adapting to their study requirements represent a need on their part to reflect on how effectively they can accommodate their study needs and their ability to engage with the university community of learners (Crisp et al., 2009; Northedge, 2003; O'Shea, 2011; Paavola et al., 2004). Where initial arrangements made prior to commencing study become complicated or untenable, due to their need to interact with their student peers and accommodate study time, they are faced with having to re-negotiate a strategy that will allow them to invest the time necessary in their private study and seek alternatives to financial support and childcare. The need to re-negotiate previous arrangements represents a

disorienting dilemma (Mezirow, 1991). Through the process of critical reflection students consider a new course of action that can support their lifeworld responsibilities while permitting them the time for university study. This in turn requires students to reflect on new strategies to accommodate the study demands of first year study. Through this process they begin to appreciate the need that when one course of action does not meet with their expectation they need to consider an alternative course of action and realise that there is a need to transform their existing attitudes, values and beliefs of what being a university student entails (Gravett & Petersen, 2004). This process is the starting point for a more integrated perspective (Mezirow, 1991) of their lifeworld values, discarding or modifying them to develop a more permeable awareness of attitudes, values and beliefs that will promote the adoption of new values that allow them to progress through their studies.

Levels of prior education

Of particular concern are students entering first year undergraduate study with TAFE Certificate III qualifications as this level of qualification does not equip students with the necessary literacies to enable them to successfully engage with first year study. While only 4.3% of students obtained entry to the B.Ed-P degree course in 2013 with a TAFE Certificate III they are not well equipped to cope with the demands of first year study (Hamlett, 2010). School leavers accounted for 50% of commencing students and it could be argued that these students would be well equipped with the knowledge and skills to cope with the first year study workload. However, many school leavers (James et al., 2010; Scutter et al., 2011) particularly those who are the first member of their immediate family to attend university, find that secondary school did not adequately prepare them for tertiary study (James et al., 2010; Scutter et al., 2011; Einfalt and Turley, 2009; O'Shea, 2011). The percentage of students reporting this has remained at approximately 16% since 1994 (James et al., 2010). The survey responses in the current study showed that 42% of students who completed the survey were the first member in their family to attend university (FIF). This figure was also reported by Scutter et al. (2011) and suggests that students who are the first in their family to attend university represent a significant percentage of first year students across the sector. While first in family students, particularly those from low SES groups are likely to derive satisfaction from their studies; they are also

more likely to report they feel overwhelmed by all they have to do in their first year of study (James et al., 2010; Lizzio and Wilson, 2005). They were also more likely to have to do paid work (Crisp et al., 2009) to assist with family income and experienced paid work as a limiting factor impacting the time they had available for study.

School leavers

The majority of students in the 18 to 19 years of age bracket work to be financially less dependent on their family and to afford the basic necessities (James et al., 2010), while students who are working more than 16 hours per week are more likely to be older, live in a remote area, be the first in their family to attend university and live in rental accommodation or own their own home (James et al., 2010). They also reported facing the same problems as mature age students in coping with the study workload, adjusting to the culture of university learning, the expectations they had of what university learning would be like and managing their time effectively (James, et al., 2010; Crisp et al., 2009; Hillman, 2005; Lizzio and Wilson, 2005; Paavola et al., 2004; Vivekananda and Shores, 1996).

Low SES Background

An analysis of Western Australian postcodes revealed that 15.27% of students surveyed in the current study are from low SES (ABS, 2009) areas. While this is higher than the Phillimore and Koshy (2010) reported state wide figure of 11.2% this variation was likely due to the small sample size (n=72), used in the current study, compared to state-wide numbers. However, within the terms of the Bradley et al. report (2008) the greatest source of underrepresented groups reported in the current study were those students who are the first member in their family to attend university. Students who were the first in their family to attend university had the potential, as indeed all students do, once they graduate to develop the professional and social mobility (OECD, 2010) that will position Australia competitively in a knowledge driven global economy.

Comparison of Findings

Comparison of the findings from the case studies and the results of the Pearson correlations presented in chapter four identify motives for studying, study satisfaction, family support and self-confidence as overall positive experiences toward study; however, difficulty in dealing with the course workload was reported in all cases. These findings are represented diagrammatically in Figure 5.1. The headings moving to the top of the test, planning and prioritising study load and financial commitments show increasing difficulty experienced by students in dealing with these issues. The top most area reveals that dealing with the course workload presents students with the greatest problems as they negotiate ways and means to deal with this issue. The litmus test represents risk factors in ascending order that can result in students withdrawing from or deferring first year study.

Overwhelmed by work load

Difficulty in keeping up: Difficulty comprehending study materials: Difficulty getting motivated to study: Causes selfdoubt and lack of confidence in being able to complete the course

Financial commitments A need to work Childcare Cost of books Raises concerns about being able to continue study Workload is a cause for concern

Planning and prioritising study load Time management Balancing study load with whole of life commitments Workload is a cause for concern

Confident in ability to complete the course

However, workload is a cause for concern:

Strong family support Provides inspiration: Causes reflection on decision to study: However, workload is a cause for concern

Study satisfaction Derive satisfaction from study: Lecturers stimulate interest in the study subject: However, workload is a cause for concern

Figure 5.1 - Litmus Test for Successful Completion of First Year Study

Elements of motives for study are listed at the bottom and show an overall positive attitude reflected in motives of wanting to obtain a good job, become a teacher and work in a profession that offers scope for being a role model and encourages personal contribution. However, the case studies revealed that students who are positive and well-motivated to succeed also had difficulty with the course workload and negotiating a solution that could reduce this problem. Moving up the litmus test toward the top are increasing indications of students' being at risk of academic failure. Comparison of the findings from the case studies and the results of the Pearson correlations presented in chapter four identify motives for studying, study satisfaction, family support and self-confidence as overall positive experiences toward study; however, difficulty in dealing with the course workload was reported in all cases. These findings are represented diagrammatically in Figure 5.1.

The Case Study Interviews

The following summary will identify the processes operating as a result of line-by-line coding of interview responses (Charmaz, 2006; Holton, 2007). The case studies showed many similarities in terms of motivation for studying at university, family values and levels of support, the workload facing students and their abilities to cope with managing their time to effectively accommodate study requirements with financial and parenting responsibilities. There was also agreement between the case studies and the responses obtained from the online survey.

Motives for studying at university

The motive for students to study in the B.Ed-P is to obtain a degree and thereby be able to engage in well-paid and rewarding work. Obtaining a degree is seen as a process that must be gone through to be a teacher, to obtain a good job and to prepare for the workforce. Interview responses indicate that a future career is dependent on obtaining a degree and is seen as synonymous with obtaining a good job and represents a utilitarian approach to higher education (Dawkins, 2014; Laming, 2012; Scutter et al., 2011). The processes (Charmaz, 2006) that support this motivation are the desire to have employment where they have the ability to make a contribution locally and globally and reflect a high value placed in education as well affording them the opportunity to be a role model for others. The motive to find a job or career is also reported by Scutter et al.

In response to the question that asked students to elaborate on why they wanted to undertake study at university, the reasons given were dominated by future career or job aspirations. Fifty-nine percent of students responded to this question and nearly half (46%) felt that finding a career or job was their main motivator. (2011, p.16)

Family values and influence

Family attitudes are significant in students' attitudes toward being a university student. Students reported that their families were supportive and proud of their decision to study at university citing meeting family expectations, high value placed in education and supporting personal choice as the key processes operating. While all students reported that their families were supportive several reported that their family was also concerned at their decision to study at university. The causes for this concern were found in the acts of having given up a job to attend university and becoming financially dependent on other family members as a result, together with concern caused by not completing a previous attempt at a degree course. Mature age students expressed these attitudes and while family support existed it was tempered in some cases with real concern for financial security and the individual's capacity to complete a course of tertiary level study. Students also expressed great difficulty with meeting financial commitments as a result of their decision to undertake university study.

The nature of family influence on students' personal values and beliefs about being a university student is to support their own view and to cause reflection on their own view. Supporting their own view is reflected in processes that place value in the need to obtain a long-term goal, making an investment in the future and supportive attitude from family members who are teachers. The processes that reflected concern about a student's values for attending university included support for undertaking a new role, listening to their suggestions and the need to study like everyone else. This caused students to reflect on their own decisions by raising awareness of the level of commitment required, advice on undertaking a new role and being determined to prove them wrong.

Student responses to these questions provide a clear example of transformational learning phase three, involving a critical assessment by students of their attitudes, values and beliefs of being a first year university student. Mezirow (1991) contends that critical assessment involves examining psychological, socio-cultural or epistemic values. The family context of these responses suggests that the critical assessment is occurring in the socio-cultural domain reflecting how it is these values came to be valued. It is conceivable that these values also contribute to a critical assessment within the psychological domain where reflection involves asking what are my values, attitudes and beliefs.

For some students an unsatisfactory previous experience with education has provided a supporting motive for obtaining a degree while for others the prospect of being a role model for primary level children is significant. The motive for attending university then can be seen as composed of several influences with the overarching requirement being to obtain a future career that offers financial security and allows for the expression of personal values held about the value and place of education within society.

Looking to a working future and self confidence

The response to question four, what sort of work do you believe you would be good at?, reveals teaching as the most frequently reported. The processes at work for that belief include a passion for teaching, belief in own character, to be a role model and to derive enjoyment.

However, there is also a desire to work with people interested in roles such as disability teaching, counselling and mentoring being reported. The processes operating here included the desire to make a contribution, being warm-hearted and a good communicator as applying to both teaching and other roles associated with working with people in a variety of capacities.

These attitudes are supported by the responses to question five: Where do you see yourself in five years' time? The overwhelming response was teaching with mentoring and counselling also being mentioned. However, further study, travel and a full time job were also reported as possible positions for five years' time. In both cases the process identified that would allow these goals to be realised was that of obtaining a degree.

Confidence and achieving the goal of being a teacher.

Responses to question six indicate students' level of confidence in being able to obtain their goals is clearly polarised between very confident and not confident. Those who reported being confident of achieving their goals believed they were self confident and were doing the right thing, in studying to become a primary teacher. However, these students also reported that adapting to the university learning environment, coping with the academic workload and, meeting financial commitments were difficult situations for them and that they were unaware of these problems before they commenced their course of study. Students who reported being not confident or experiencing fluctuating levels of confidence, expressed the same concerns as students who reported they were confident; adjusting to the university environment, being stressed by the academic workload and, being unable to meet financial commitments.

Those who claimed they were not confident reported poor planning and study skills as a reason for their lack of confidence. However, this characteristic was not reported by students who said they were confident. Confidence then is associated with being able to cope with the study workload through effective study and planning skills. This should then be a major concern for educators if students are to be supported and develop the level of confidence necessary to succeed in a student centred learning environment.

The importance of obtaining a degree in order to be able to achieve the stated goals is reflected in responses to question seven, which asks, are you open to alternative viewpoints? Responses here acknowledged that there was value in considering the viewpoints of others. This can also be seen in the responses to the influence family views have had on the decision to undertake a teaching degree.

Consideration of alternatives and options if success at teaching is not to be, were key processes supporting these responses. However, the fact that a degree is necessary if goals are to be met resulted in some responses that indicate they are not open to alternative viewpoints. The most frequently reported within this group were that there are no options to succeeding at this desire. Without a degree it will not be possible to become a teacher or have a good job.

Problems with university study

The interview responses to question eight: Are you having any problems with university study? and question nine: Can you tell me what the problems are?, reveal a disturbing aspect to students' first year experience. While some report that they are "not really" having any problems with study, they indicate that the workload is very demanding and they feel overloaded by it. From an educator's perspective this raises concerns about how long they can sustain the level of engagement with the process of learning that is necessary if they are to succeed. This concern is heightened when the responses that identify workload directly as a cause of concern are considered. Study workload is reported as a problem leading to feelings of being overwhelmed, causing difficulty in adjusting to the type of study expected, difficulty in keeping up with the study load and being able to maintain a healthy work life balance.

Time management

Managing time in order to be able to cope with the study load is a problem. Students report not having enough time to deal with one topic area before having to deal with yet another. Learning how to reference correctly and understanding which areas they need to study are seen as problems that require a greater level of planning and prioritising skills than they currently possess. The level of stress reported by some students, as a result of the workload being too high, caused self-doubt that they would

be able to succeed in their goal to become a teacher. Time management is also reported as a problem that is seen not only in relation to requirements of study, but in how those requirements can be met within the larger framework of parenting and generating an income.

The need to balance parenting responsibilities with study is an area of concern given that the responses to the survey conducted in the current study indicate that 15% of students have to arrange childcare. No data are available to indicate that these are the only students with parenting responsibilities. It is possible that other students are facing difficulty with balancing parenting responsibilities with study but do not need to arrange childcare. The process of adjusting to university study is also seen as a problem with some students reporting that they are having difficulty adjusting to the style of teaching resulting in further difficulties with being able to keep up with the study workload.

Others are having the same problem

Question 10 asks students to report if they are aware of other students having the same problems. The overwhelming response to this question is that they are. This is a further cause for concern as the responses already noted from students that indicate their being overwhelmed, having trouble with the workload, trying to manage their time and meet their financial obligations, are shared by other students. This response further reveals the persistent problem of the study workload being too high. This problem has been reported consistently in the previous questions and it is clear it is a cause of the level of stress reported by students.

It is concerning that students are thinking negatively at this early stage of the course. It appears from the responses provided that the workload is simply too high for students to adapt to, leading to feelings of self-doubt and anticipated failure. All students interviewed, except one, reported that they all knew other students who were experiencing the same problems as they were. The problems reported were consistent with those reported in previous questions and included time management and excessive study workload that result in a level of stress.

Dealing with the problems

Question 11 and question 12 ask students to identify if they have a plan of action for dealing with these problems and whether or not they have the skills to implement such a plan. Student responses are mixed and identify elements of dealing with the study workload including focusing on readings and improving time management as areas in which they need to improve.

The processes at work in identifying ways to deal with these problems include reorganising financial commitments, adjusting to study requirements, building self-confidence and being able to focus on tasks. Seeking professional help for health issues is also seen as a way of coping with the problems. Those who confidently report having a plan of action and being able to implement it, along with those who think they have a plan, indicate that self-confidence and maturity are necessary skills. Those not able to implement a plan report workload and stress as the main reasons for their inability to cope.

Principal among the transformational experiences students reported were that of a disorienting dilemma and critical reflection, exploration of options for new roles and awareness that others were experiencing similar problems to themselves. A detailed analysis of the transformational elements of student experience is presented later in the current chapter.

Case studies showed that students regarded obtaining a university degree from a utilitarian perspective (Dawkins, 2014; Laming, 2012) as a way to improve financial and employment security in the years ahead, at the cost of reduced time for family and socialisation and, in many cases, reduced financial income in the short term, while studies are undertaken. Students reported their motives for studying at university as providing them with future secure employment with the ability to do something they perceived as worthwhile in terms of making a contribution and being a role model. Some also reported dissatisfaction with present circumstances as their motive, citing current financial difficulties and that obtaining a degree would lead to employment that provides sufficient income to meet their needs.

Responses also showed that while obtaining a degree was seen as providing financial security and employment, the role of teaching also offered some participants an opportunity to work in a profession that they believed would allow them to use their passion and make a contribution in the course of their professional career. Their expectations of what university study would be like and the difficulties they reported with adjusting to the workload were reflective of the experiences reported by other first year university students (Brinkworth et al., 2009; Crisp et al., 2009; O'Shea, 2011; Scutter et al., 2011).

Students reported an overwhelming concern with study workload and the need to maintain a financial income while they were studying. It is important for universities to understand students' experience if appropriate teaching and learning strategies are to be developed and delivered. The impact of study on work-life balance is not limited to the time required to read prescribed materials and complete assignments, but has a far reaching effect that impacts real earning ability, quality of life and the extent to which a student is able to engage with learning processes. These responses are characteristic of those reported by other studies into first year student experience (Brinkworth et al., 2009; Crisp et al., 2009; Hillman, 2005; James et al., 2010; McInnis & James, 1995, Scutter et al., 2011), which reported that students had difficulty finding time for private study, managing their time and dealing with financial commitments. Student responses also showed that adjusting to university study involves a level of participation and socialisation (Walck & Hensby, 2003) and that learning does not happen in isolation (Vivekananda & Shores, 1996) from other life responsibilities.

The interview questions have been mapped (Appendix 3) to phases of transformational learning (Mezirow, 1991) and showed that students experienced an initial process of exploration of new roles, relationships and actions expressed through their motives for studying at university. This process was followed by one of critical assessment of psychological, socio-cultural or epistemic assumptions when considering family values, the influence of those values on their decision to study at university and where they see themselves in five years' time. These assumptions are representative of their meaning perspective and meaning schemes through which they engage with the learning experience (Mezirow, 1991).

The problems experienced by students represented a disorienting dilemma and an understanding that others are experiencing the same problems, while the process of planning a course of action is represented in their responses to questions asking how they will deal with the identified problems. The student centred nature of university learning, challenges students accepted ways of knowing and doing (Northedge, 2003) and while students have a responsibility to engage with their academic progress (James et al., 2010; Lizzio & Wilson, 2005) the numbers entering university from non-traditional pathways and the increasing cultural and social diversity of first year students results in a corresponding diversity of student expectations of what is required for successful study. The survey results of the current study have shown that only 50% of students have completed year 12. The remaining percentage is composed of mixed prior educational experiences ranging from university preparation study 4% to TAFE certificates III and IV. This represents a diversity of prior educational experience in a variety of fields some of which are not considered as being of the standard required for a first year student (Hamlett, 2010).

Sources of Stress Influencing Student Performance

A consequence of the need for students to work is the stress it causes as they frequently have accepted less paid hours, or depend on a spouse or partner to bring in the income while they study and is representative of at risk behaviour (James et al., 2010). This concern was raised in the interview responses with several students expressing their concern that they fear they will not be able to continue with a full time study load due to the financial stress they are experiencing. In some cases the financial stress limits engagement with learning and results in a lack of self-confidence and motivation, which further exacerbates their ability to be successful at their study.

The results from the previous questions are a clear indication that students do not undertake study in isolation from other life responsibilities (Vivekananda & Shores, 1996), but through a process requiring time management skills, planning and prioritising abilities, seeking to incorporate their study into their whole of life experience (James et al., 2010). Motivation for undertaking first year study (Scutter et al., 2011) is strongly expressed as the need to obtain a good job and career. However,

career motive is not as strong (Walck & Hensby, 2003) as the need students have to adjust to study requirements and adapting to the university way of life. The problems reported suggest that students are not coping with this situation as a result of a high workload, poor time management skills and, financial commitments. This situation is causing students to doubt their ability to successfully complete their course of study and is a source of great stress for many.

A typical full time on campus attendance is 12 hours per week with a requirement to invest typically two times that figure in their own time to complete readings and assignments. However, students (James et al., 2010) have typically reported only spending 10 to 11 hours per week in private study. Full time study then can easily occupy 22 to 23 hours per week, leaving little time for other life commitments. With 92% of students reporting they do some paid work, and of these 35% report working in excess of 15 hours per week to meet transport, food, clothing, utility bills, loans as well as provide some level of support for themselves or their families, the time per week spent by students becomes 37 to 38 hours per week. This is equivalent to the normal 37.5 hour working week. Additionally, 15% of students indicated they needed to arrange childcare in order to do this course, which adds a further financial burden.

The problems reported by students in response to questions (eight, nine and 10), are indicators of students who are at risk of not being able to succeed as a result of either dropping out through choice or possible failure. The problems reported here are of concern as they clearly portray a student population that is having the sort of difficulties with coping and adjusting to university study that place them in an at risk group.

Of further concern are responses to questions 11 and 12 that ask if students have a plan of action and have the skills to implement it, in order to deal with the problems they have identified. Student responses are mixed and identify elements of dealing with the study workload including focusing on readings and improving time management as areas in which they need to improve. Those that confidently report having a plan of action and being able to implement it along with those who think they have a plan, indicate that self-confidence and maturity are necessary skills. Those not able to implement a plan report workload and stress as the main reasons for their inability to cope.

Comparison of student experience

Alan's motive for study at university was to allow him to gain the necessary knowledge in order to graduate as a teacher, a role that he saw as providing him with opportunity to be employed in a profession that would allow him scope to exercise his personal values of being a role model and making a contribution. His family's views of his decision changed from being shocked at his decision due to his age to being supportive and expressive of the belief that he would do well. His wife and brother are both teachers and this suggested a level of awareness on his part of what the profession of teaching would involve and how well he believed he would be able to meet the expectations and responsibilities of being a teacher. Additionally, his experience as a single father was significant to him in that he believed the experience provided him with an opportunity to better understand children and therefore established a better father-child relationship than most men have the opportunity to experience. This experience was an important one for him in deciding to be a teacher.

In five years' time Alan saw himself as a teacher engaged in employment that he believed he would enjoy and was confident of his own abilities to succeed at his studies. However, he also expressed the belief that his biggest problem would come from being able to meet his financial commitments while he was studying. Financial commitments are recognised as a major cause (James et al., 2010) of student deferment or failure. This suggested that while his wife is being the sole income earner while he is studying, her salary alone may not be sufficient to meet all the financial demands and should the financial situation become difficult he may have to consider part time study as an option to allow him to earn some income. His age was again a factor in his own estimation of his ability to complete the course as he did not want to take twice as long to graduate compared to studying full time. He was prepared to look at other roles such as mentoring or counselling if the need arose but believed that these roles would probably involve working with older children.

Alan regarded prioritising study as the greatest difficulty he was experiencing with his university study; specifically he expressed difficulty in knowing what to study and in what order so as not to waste time. This suggested that being a student centred learner (Lizzio & Wilson, 2005) was not an experience that was easy to manage despite his

strong family support. While his brother and his wife are both teachers and this suggested he might have some valuable insight into what the role of being a teacher entailed, it was not necessarily of benefit to him as a student. His age again became an issue when he considered whether or not other students were having the same problems as he was. While he worked on assignments with some younger women he did not discuss problems with study with them as he felt an age gap. This suggested that engaging in a community of practice (Paavola et al., 2004) formed by other students and the greater university community was not something that Alan was finding easy due to his age. However, he believed that it was important in a new situation to observe how things operated and then adapt to it. It is possible that he was therefore focussed on observing how the learning environment of the university operated before he was prepared to adapt to it.

Anna's motive for attending university was a utilitarian one (Laming, 2012) in that she wanted to make more money than she was currently able to make, by becoming a teacher. She saw university study as a way to obtain a qualification that would enable her to gain employment that was financially rewarding and allow her time to spend with her children. She did not have a great deal of family support for her decision to study at university and described her family's attitude to her studying as one of bemusement. In five years' time she saw herself teaching in a school for the disabled and was not prepared to entertain alternative views claiming that she simply could not afford to fail at study as for her it was a matter of survival. Anna described time management and prioritising study as her greatest difficulties in relation to her study. Anna also expressed concern at the cost of university study. Some of these costs she believed were hidden as she was not told of them before she encountered them. She believed she should have been told of these costs as this would have enabled her to better plan how she could afford them on a limited income. Her father paid these costs for her but she had formed the opinion that mature age students had a more difficult time of studying than younger students since their parents would pay for them. This opinion was contrary to the evidence (James et al., 2010) that while younger students generally work to obtain a level of financial independence from their parents many are faced with having to work to meet basic necessities. While her father paid for these additional costs she also had to resort to paying her utility bills in instalments as a way of implementing a solution to her financial problems while she was studying.

She also reduced her study hours by dropping from four units to three in order to allow her to look for some part time work. In terms of being able to deal with her study problems Anna saw being determined as the key skill she needed. Anna's story revealed that she is undertaking university study without the level of family support that Alan reported and that she sees the road ahead in terms of achieving her goal of being a teacher as one she will likely have to walk alone.

Brian's motives for attending university were based on his belief that he was not progressing in his previous job in training in the banking sector, a position he had held for ten years. He also believed he was better suited, as did Alan, to working with children. Unlike Alan however, Brian did not have the same level of family support, an experience that he had in common with Anna. He reported his family attitudes to his study as concerned that he had given up a job of ten years and had not completed a previous course and that their concern had caused him to doubt his decision to be a teacher. As well as causing himself doubt his family attitudes also caused him considerable anxiety and stress. However, Brian believed he could succeed at becoming a teacher and he was determined to prove his family wrong. He also believed that he was capable of achieving his goal as he had good problem solving skills and had the benefit of life experience and maturity to help him, again something that he had in common with Alan. He wanted to be in a school in five years' time teaching, but unlike Anna being a mentor or counsellor were also viable alternatives for him. This suggested that Brian had considered his options and was happy with what these options might offer him in the future.

Brian's greatest problems with university study were time management and balancing study time commitments with home life and parenting. These problems are typical of the experience of many students and are consistent with the views expressed by Alan and Anna who were also finding it difficult to manage study requirements with other responsibilities in their life worlds. For Brian the problem of time management was causing him some anxiety, which he said was a cause for depressive episodes that he had previously experienced. He also said that they were not told of the amount of work involved before they had started their course, however, he believed he had the coping strategies to deal with managing his depression and was seeing a therapist to help with controlling his depression. He was aware that many students were

experiencing problems with managing their time and unlike Alan and Anna was aware that younger students were also struggling with time management issues. This suggested that Brian had a greater awareness of other students and therefore may have been adjusting to the community of learners more effectively than Alan and Anna had. Brian believed he had the skills to implement a solution for his study problems as he had experience with seeking help with a prior problem of depression and had developed good self-monitoring skills. He also revealed at the end of the interview that his family did in fact provide him with some support by helping him with time management strategies.

The nature of family support experienced by Alan, Anna and Brian varied from providing financial income to paying for course requirements and providing assistance with time management strategies. Their stories revealed that time management was the greatest problem facing them as mature age students. Difficulty with planning and prioritising study is an often reported problem (McInnis & James, 1995; McKenzie & Schweitzer, 2001; O'Shea, 2011) for first year students. Alan's, Anna's and Brian's awareness of their planning and time management difficulties suggested an awareness on their part that studying is an (Gravett, 2004; Gravett & Petersen, 2002) experience that necessitates a transformation of attitudes in order to deal effectively with study load. Additionally, establishing one's identity as a student in the university environment (O'Shea, 2011) involves adapting to an environment that is different to the existing social and working environments that are part of an individual's life world. All three were determined to succeed at their course of study with determination, personal conviction and ability to manage problems reported as strategies that would assist them to do so.

Bridgette's motive for studying at university was to become a teacher and she saw teaching as being a good job. Her family were very proud and supportive of her decision to study at university. While Bridgette enjoyed the support of her family, she was adamant that even if they had not been she would still have followed her passion to become a teacher. She believed she would be a good primary school teacher and saw herself in five years as a graduated teacher working in a school and was not prepared to consider other alternatives.

Bridgette's greatest problem with studying was that it was a lot harder than she expected and that this had caused her a lot of stress. She was also aware of other students finding the study hard but believed that others were better able to cope with stress than she was. Bridgette was a very passionate student who believed her passion for teaching would enable her to deal with study problems and graduate in the future. She was also seeing a university counsellor to help her deal with the stress that studying caused her. She also reported that if she was unable to get a job that her parents were financially able to support her until she gained employment. This contrasts sharply with the experiences of the mature age students, Alan, Anna and Brian, who were very concerned about managing their financial situations.

Christine's motives for studying at university were to be a teacher; a job she believed would allow her to be the best she could be. In common with Bridgette, her family was supportive and proud of her decision to be a teacher but she would have decided to be a teacher even if her family did not believe it was right for her. In five years' time she saw herself working in a rural or remote school in Australia and then travelling overseas to continue teaching in poor countries. She was prepared to consider alternative views but would make up her own mind at the time. Christine experienced being overwhelmed by the course workload as well as having to find time to work to afford basic necessities. This she shared in common with the mature age students Alan, Anna and Brian. She was aware that every other student she knew was also experiencing problems with the study workload. However, for her this realisation allayed some of the stress she was experiencing. She had good study skills and believed she would be able to cope with the study load by taking it bit by bit. She reduced her paid working hours to enable her to have more time to deal with study problems but this caused her financial stress. Her solution was to try and save some money to ease the financial problems she was having.

Denise's motive for attending university was to get a degree and thereby enable her to study further while she was deciding what she wanted to work as. She was unsure exactly what her family thought about her studying as they lived in England, but believed they would be happy as they had always expected she would go to university. Her family's attitudes to study had influenced her own as she had taken two years off after completing high school before enrolling at university. This

contrasted with the experience of Bridgette and Christine who were not prepared to consider alternatives. This suggested that Denise's experience of having two years off before studying had made her realise that if she was to get anywhere with her ambitions she had to go back to studying.

In five years' time she saw herself doing something that interested her but unlike Denise and Christine did not mention teaching. She was very confident about her ability to succeed at the course and was prepared to listen to other viewpoints if the situation called for it. This she shared in common with Christine and was also unlike Bridgette's response of not being prepared to consider alternatives. The problems she was having with her study were those of time management but she also believed that she had just about succeeded in managing her time effectively. This was different to the other five students who all reported ongoing problems with time management. She was aware of other students having time management problems but believed she had already solved these issues. The comparison of student experiences revealed that all students were experiencing problems with the study workload and that the major problem in this context was that of time management. All mature age students reported financial difficulties as a result of their decision to study while one student of school leaver age also had financial difficulties.

The responses to the survey conducted in the current study show over 50% of students have reported (James et al., 2010), at risk behaviour. Within this figure only 15% to 30% of students also reported enjoying being a university student, that their lecturers sometimes stimulated their interest in the topic, deriving some level of satisfaction from studying and enjoying the intellectual challenge of studying. The at risk behaviour reported included being overwhelmed, having difficulty getting motivated to study, having difficulty comprehending study material and having difficulty keeping up with the study load in this course.

An analysis of the interview responses (Figure 5.1) also reveals that while students report some degree of satisfaction from study and have family support their confidence in their ability to complete the course is strongly influenced by their lack of time management and planning skills, experiencing financial hardship and being overwhelmed by the course workload.

To provide a more equitable higher education system in Australia, Bradley et al. (2008) recommended making higher education more accessible to disadvantaged and low SES groups. As universities have sought to meet the Bradley et al. recommendations, it is clear from the results of the current study that an equitable system of education (Gale, 2009) cannot be achieved by simply enrolling more students from identified disadvantaged groups. The assumption that equity issues can simply be addressed by increasing enrolments ignores the increasingly diverse nature of the first year student cohort and contributes to the creation of a learning and teaching environment that challenges their existing ways of knowing and doing. In discussing the nature of equity in terms of social groups within the student population, Gale contends that approaches to equity are concerned with:

...bums on seats, or to be fairer, particular bums on particular seats. On the face of it, these are matters that have more to do with what happens before and at the point of university entry, than with what students experience once they have entered. (2009, p. 2)

Students who participated in the interviews conducted in the current study reported not being aware of the extent of the study workload and the requirements for effective time management, planning and prioritising skills needed until after they had enrolled and commenced their course of study. The at risk behaviours reported by students in this study are a consequence of inequities in the system that are manifested in the amount of time students are required to study while having at the same time to deal with whole of life responsibilities outside the university environment.

Transformative Dimensions of Students' Lifeworlds

The analysis of interview responses revealed that students are experiencing several phases of transformation as they adapt to the requirements of university study. The phases of transformation experienced by students were based on students' own stories of both the positive experiences of learning at university and the common problems they faced as they adapted to the student centred nature of university study. These problems were consistent with those reported in chapter four of being overwhelmed by the course workload and having trouble comprehending and coping with study material, while trying to accommodate these with existing responsibilities in their

lifeworld. While students were generally enthusiastic about studying at university, both school leavers and mature age students reported that the course workload was overwhelming and in some cases caused self-doubt about their ability to succeed. Mature age students were also more likely to face financial hardship having given up full time employment in order to study and relied on the income of spouse or partners. While this was seen a necessary consequence of undertaking full time study, it was also a cause for concern that they would not be able to complete the course if their reduced income did not allow them to meet existing financial commitments.

The responses to each interview question were analysed using line-by-line coding (Charmaz, 2006) to define the key descriptive words and phrases, processes operating and core responses to each interview question. The process began with coding the descriptive words and phrases in each response to determine first level codes. The descriptive words and phrases were then compared against each interview response to determine the motives and reasons for each response and were coded as operative processes. The operative processes were then refined into core categories that represented the interviewees' core responses to each interview question. The descriptive words and phrases, the processes operating and the core responses are presented in Appendix 4. The core processes were then compared to the phase of transformational learning (Mezirow, 1991) that was mapped to each interview question. This method allowed determination of the nature of transformative learning accompanying each group of core responses.

Interview questions were grouped into three categories. The first of these, 'Motives and family attitudes' consisted of question one: What are your motives for studying at university? Question two: What do you think your family thinks about you attending university? and question three: How have their values shaped your own? This permitted representing core categories and the phases of transformational learning diagrammatically (Figure 5.2, p.166).

The second group of interview questions dealt with the type of work students believed they would be good at, where they see themselves in five years time, how confident they were of being able to get there and how open they were to alternatives. This group was called 'Type of work and confidence' (Figure 5.3, p.169) and represents

the core responses from the line-by-line coding process and the phases of transformational learning.

Using the same method a third group, 'Problems with university study' (Figure 5.4, p. 174), represent the core responses and phases of transformational learning occurring for questions (8-12). The responses to these questions permitted an understanding of the problems students reported with university study, their awareness of other students experiencing the same problems and their ability to plan and implement a course of action that would allow them to resolve the problems.

Motives and Family Influence

Responses to Survey

Analysis of the responses to question one identified motives for studying at university included wanting to be a teacher, the belief that university study was good preparation for the workforce and would provide an opportunity to obtain a future career. The most commonly identified future career was that of being a teacher. However, some responses indicated that other roles such as mentoring or counselling were considered. Personal passion about the role of being a teacher and inspiration from family members were also important influences. Personal passion was evident in responses that revealed motives of being a role model, being able to make a contribution and desire to work with children as the most common responses. Dissatisfaction with present or past circumstances was also a strong motive for undertaking university study and included limited opportunity for career advancement, lack of enjoyment with past careers and, limited financial income.

Family attitudes, question two, were reported as supportive of the decision to undertake university study. Descriptive words such as "proud", "encourage" and "pleased" were common in student responses to this question. These attitudes revealed that family members regarded teaching as a good career choice, that study was an opportunity to get a degree and improve future employment prospects and support for individual choices that were made. However, mature age student responses also indicated a level of concern on the part of family members. The concern arose from student decisions to either give up an existing career or accept

reduced financial income in order to study. There was also some concern expressed that previous undertakings at study were not successful.

The influence of family attitudes on students' own thoughts, question three, revealed that family attitudes were a source of inspiration and confidence that a good decision had been made in deciding to undertake university study. However, family attitudes also resulted in students reflecting on their own decision to become a teacher and raised awareness of decisions to accept reduced income while studying. Family attitudes were also cause for doubting the self and increased anxiety levels prompting determination to succeed. A small number of students reported that family attitudes were no influence on their own thinking at all and that they had made up their minds and were not prepared to listen to family members about their decision to undertake university study.

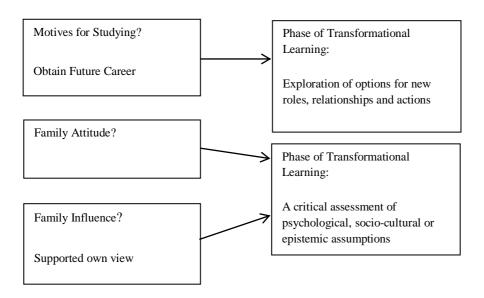
Grouping of these processes revealed that students' motives for studying at university were to obtain a future career, satisfy family values and satisfy personal values. Family attitudes were represented as approving and supportive and approving and concerned while the influence of family values on the views of the students were coded as supported my own view, caused reflection on my own view and no influence. The core responses were also mapped with the phases of transformational learning that were occurring. Phase five, options for new roles, relationships and actions was occurring in student motives for undertaking university study. Phase three, a critical reflection on psychological, socio-cultural or epistemic assumptions was operative in students reporting family attitudes and the influence of those decisions on their own views and the decisions they had made.

While the current study has not sought to determine which assumptions, psychological, socio-cultural or epistemic, students are critically assessing, it is possible with reference to content, process and premise reflection (Mezirow, 1991) to describe the nature of the critical assessment process. Content reflection is reflection engaged in within the psychological learning domain and can be represented by asking the question: What are my attitudes, values and beliefs? Process reflection is reflection that occurs in the socio-cultural learning domain and can be represented by asking the question: How did I come to have these attitudes, values and beliefs? Finally, premise reflection is reflection engaged in within the epistemic learning

domain and can be answered by asking the question: Why do I believe my values, attitudes and beliefs to be valid? Based on the definitions of content, process and premise reflection it is now possible look at the responses provided in the interviews to better understand the nature of critical assessment students are experiencing. The grouped responses showed that students experienced the transformative phase of exploring options for new roles in the form of being a student and being prepared to listen to the views of others while exploration of new relationships occurred by way of developing new relationships with family members, other students and academic staff while new actions included the desire to be a role model and meet personal and family values.

Reflection on psychological assumptions, those that identify the self, occurred in reflecting on their own decision to undertake university study, often at the cost of reduced financial income in the short term. Reflection of socio-cultural assumptions is reflected in family attitudes that being a teacher is a good career while reflection on epistemic assumptions was revealed in student decisions that they had made the right decision.

The core responses and the corresponding phases of transformational learning are shown in Figure 5.2.



Type of Work and Confidence

Analysis of responses to question four revealed the type of work students believed they would be good at included teaching, working with children and working with people. The processes operating in these beliefs were a passion for teaching, obtaining a career that would provide financial security and providing an opportunity to be a role model and make a contribution. They also represented that for many students the decision to be a teacher was reflective of their own values and belief that they could become a teacher. These responses permitted the core categories for this question to be represented as teaching and working with people.

Question five responses revealed the majority of students see themselves teaching in five years' time. Alternative pathways were counselling, mentoring, travelling or continuing study. Teaching was seen as a career that would provide opportunities to teach in poor countries teach disabled people or teach children. While many positions were described including teaching in poor countries, teaching disabled and teaching children the underpinning process at work was that of successfully graduating. Whatever the position desired or seen in five years' time they were conditional on graduating as without a degree it would not be possible to be a teacher. Core responses were teaching, studying or working.

Responses to question six revealed mixed levels of confidence in being able to meet a five year goal. Those who were confident were still concerned about study workload and financial issues, but expressed strong intention to succeed. The reasons for the confidence expressed were reported as life experience and personal determination that allowed them to make decisions and adapt to the conditions of learning and reduced financial income. Those who were not confident reported being overwhelmed by the study workload and difficulty comprehending the study material. The processes at work for the less confident were the same, workload, financial commitments and adjusting to university life and the university style of teaching. Some reported that they were so overwhelmed that they doubted their ability to succeed. Core responses were confident and not confident.

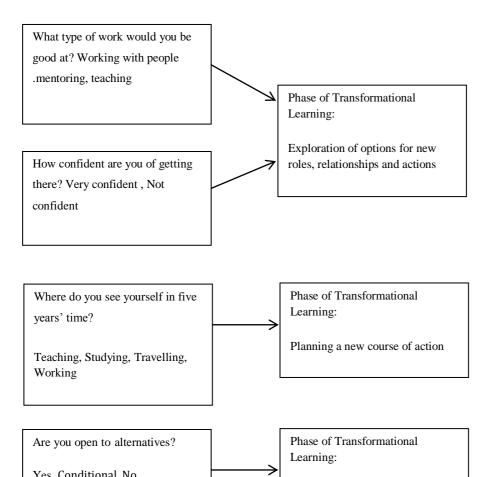
Responses to question seven showed mixed responses to considering alternatives. Some reported that they would consider alternatives to where they want to be in five years' time if and when the situation required it. The processes at work included valuing opinions of others and being prepared to consider other points of view. For some students, the need to be financially secure was essential. The need to do paid work limited the amount of time they could devote to study. Often these students would be confronted with limited alternatives and the pressure would increase. This response was most common in relation to financial commitments and suggested that reduced financial income would be acceptable in the short term but was not sustainable in the long term. Some students reported they were not prepared to consider alternatives as they saw graduating as the only way they could achieve their goals. Core categories were yes, conditional and no.

Responses to this group of questions were analysed using the three phases of transformational learning. Phase three, a critical assessment of psychological, socio-cultural and epistemic assumptions was mapped to question four, what sort of work do you believe you would be good at? and question six; how confident are you of being able to get there? The type of work that students believed they would be good at requires that they have made a critical assessment of their own attitudes, values and beliefs and arrived at the conclusion that they would be good at teaching, working with people or working with children. Their confidence or lack of it suggests another critical assessment process where students have thought about their experience as a first year student and drawn from that experience an assessment of how they believed they would cope with the workload necessary to reach their five year goal.

Where they saw themselves in five years' time represents planning a course of action; transformational learning phase six. Ability to cope with the study workload and comprehend the study material had a significant impact on their confidence. Responses indicated that all students were finding the study workload difficult to deal with and the influence on their self-confidence resolved into them either being confident or not confident. However, core categories indicated that in five years' time they would be working in a school as new teachers or continuing with further study and travelling. Working as a teacher was the majority response and the options for travelling were seen as concurrent with being a teacher. One student reported that she

was inspired to start her own community school in South Africa as her in-laws had done, while another saw returning to her home country and being a teacher there as her ambition.

Student responses to question seven: Are you open to alternative viewpoints? fell into three categories: yes, conditional and no. This question was mapped to transformational learning phase five: Exploration of options for new roles, relationships and actions. The processes operating in these responses were seen by some students as options to consider if they could not succeed at becoming a teacher. The causes of not succeeding were reported as difficulty with the study workload and meeting financial commitments. The degree to which they were prepared to consider alternatives represents an exploration of options that may be available at some time in the future. However, some students reported that they were not prepared to consider alternatives and believed that the only course of action open to them was to succeed at their study and then graduate as a teacher. Financial considerations were also important in this decision as working as a teacher was seen as a more financially rewarding career than their current position while for others self-determination limited their acceptance of considering any alternatives. This last group also spoke very passionately about the value they placed in being a teacher and they were not prepared to consider not becoming one.



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Figure 5.3. Type of Work and Confidence

The core responses to this group of questions indicated that three phases of transformational learning were operating when a student considers where they want to be in five years' time, the sort of work they believe they would be good at, the confidence they had about being able to get there and their preparedness to listen to alternative points of view.

Each of these questions required a student to critically think about their choices and the options that were available to them in the event they could not realise their goals.

The critical assessment process is one that led to feelings of being confident or not confident. For those that were confident critical assessment had led them to believe in or reaffirm their own goals while for those who were not confident assessment led to a belief that they might not succeed. The core responses linked to the phase of transformational learning occurring are shown Figure 5.3.

Problems with University Study

Problems with university study, awareness of others having the same problems and strategies for implementing a solution to these problems were reported in the final group of questions; problems with study. This group of questions consisted of responses to questions (eight-12) and were the most detailed of all the interview questions that were asked.

Responses to question eight: Are you experiencing any problems with university study? and question nine: Can you tell me what they are? revealed that some students were having difficulty adjusting to the university environment and the university style of teaching. One student who had entered university after completing a TAFE Certificate IV qualification claimed that the biggest difficulty was getting used to the

study load at university. The study load at TAFE was not as high. The most common study problems reported were the volume of work that had to be dealt with and how to manage it. A typical response was;

Brian: Yes, in regards to time management, some of the younger ones are also struggling. We were not aware of the amount of work involved in studying.

Time management and prioritising skills were reported as the greatest difficulty students were experiencing in their attempts to deal with the study workload. Financial concerns and meeting financial commitments on a reduced income level were also cited as problems with studying at university. Responses clearly indicated that balancing study commitments with other commitments was difficult for most students. Of the 11 students interviewed only two reported that they were not having any real problems and saw adjusting to the study load and the university environment as just something that had to be done if they were to be successful at university. The responses below illustrate difficulties with time management and planning study:

Alan. Prioritising study. Knowing what to read first. Reading lists do help; but I ask myself if this is enough. Should I be spending time right now reading books I think are relevant, but end up wasting my time?

The workload was perceived as a major problem and together with financial issues represented the greatest problems for students. Being a single parent was also difficult in that it made studying at home difficult or impossible. Core responses to question eight were coded as "yes" and "no", while core responses to question nine were coded as "dealing with the volume of work", "managing my time" and "adjusting to university".

The responses to question 10 revealed that students were aware of other students who were having the same difficulties as they were. Difficulty adjusting to the study workload was the most commonly reported, with financial issues and parenting responsibilities reported as difficult issues facing most mature age students. The most reported difficulty was in managing the study workload. Students consistently referred to not having the time management skills to deal with the study workload and accommodate other aspects of their lives. Younger students reported that just coping with the study workload was too difficult for them, while mature age students also

reported that the study workload was too high and that fitting in the time to meet study requirements was difficult, along with meeting other responsibilities in their lives, including meeting financial commitments and parenting responsibilities. One mature age student reported that he was not aware of any difficulties facing other students as they did not talk about these issues and believed it was due the age gap. Core responses were coded as "yes" and "no". A typical response was

Denise. Every student I have spoken to at any university finds the same problems in group assignments. Most of the first year students I have spoken to have the same overwhelmed feelings.

Responses to question 11 revealed that students had a variety of solutions for dealing with the study problems they experienced. In terms of study experience these included becoming more focussed on the study content to better understand how to prioritise study tasks, concentrating on study and settling into the university environment. One student had started to make partial payments on her utility bills to better deal with financial matters. The most common solution, however was to improve time management skills and improve goal setting. There was some ambivalence in responses that showed some students did not have so much a solution for their problem but were simply hoping for the best with one student saying they had no solutions to the problems at all. These were coded as core categories of "yes" and "no". The responses to question 12 reflected that students had three predominant beliefs about having the skills to implement a solution to their problems. One belief was characterised by phrases such as having the personal commitment to see it through, the ability to use resources and could plan and manage their time, and improve their time management skills. The second belief from this group of students featured phases including they thought they had the skills and cited maturity, timetabling and planning and personal determination as qualities that would permit them to implement a solution. It appeared that these students believed that they had the skills necessary to implement a solution but were still uncertain of how best to apply their skills. The third set of beliefs reflected students who believed they did not have the skills necessary to solve their study problems, were not certain if they did or not, and considered that the chances of them passing were not promising. These students reported being highly stressed by the experience of university study and were unmotivated by the experience. Some hoped for a change in circumstances while

others were going to wait and see what the results were before deciding further if they had the necessary skills to cope with university study. The core responses were coded as "yes", "think so" and "no".

Phases of transformational learning occurring in this group of questions were phase one a disorienting dilemma; phase four recognition that one's discontent and the process of transformation were shared and that others had negotiated a similar change; and, phase six planning a course of action.

Responses to questions eight and nine that identified there were problems with studying at university are representative of a disorienting dilemma. The experience of being a first year university student was one that was not easy for students. Others who reported they were so overwhelmed they had become unmotivated and could not manage their time in order to study effectively, as expressed by their personal commitment and determination to succeed, was offset by their existing attitudes, values and beliefs. This represents a situation where existing attitudes, values and beliefs were partially able or partially unable to explain their current experiences of university study.

Students reported in question 10 that they were aware of other students having the same problems as they were. These correspond with transformational learning phase four, a recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change. Of the 11 interviewees 10 reported being aware of others having the same problems as they were. This phase of transformation positions the student's experience within the larger context of the community represented by other students.

A typical student response was;

Christine. Every single student I know is feeling overwhelmed and we're already thinking negatively about being behind already. We're just being told about books to get then have to do a chapter of reading on the books we don't have and there's just a lot to do.

The core responses to questions eight to 12 inclusive are represented diagrammatically in Figure 5.4 on the following page. Questions eight and nine are

grouped and relate to a disorienting dilemma. Question 10 relates to awareness on the part of students that their discontent is shared and that others have, or are currently, negotiating a similar problem while responses to questions 11 and 12 are representative of planning a new course of action.

Responses to questions 11 and 12 revealed that students had mixed responses about having a plan of action for solving their problems and the skills to implement it. These questions were mapped to transformational learning phase six; planning a course of action. Those who reported having a plan of action indicated that they believed they had a solution to their problem citing rearranging financial commitments, improving their focus on studying, breaking down study tasks into manageable chunks and using their self-confidence to motivate them. Those who did not have a plan or had a wait and see attitude to dealing with their problems cited taking the study load a little bit at a time and hoping for the best. These ideas were shared with other students and provided a source of recognition that others were negotiating a similar change in their existing attitudes, values and beliefs. Others reported having maturity, making tables and lists to help with managing the study load, and were aware that they needed to improve their time management skills.

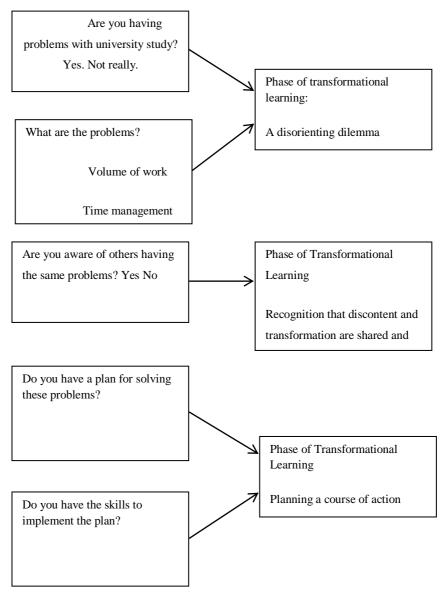


Figure 5.4. Problems with Studying at University

Student Experiences of Transformation

Students reported their motives for studying at university were to obtain a future career, to meet the expectations of family members and meet their expectations of themselves. These motives represented studying at university as an exploration of options for new roles, relationships and actions (Mezirow, 1991). Exploration of new roles was evidenced in their goals of becoming a teacher or other profession that required working with people such as mentoring or counselling. Preparing them for this new role, by studying at university, also offered the opportunity to explore the

role of being a student and adapting this role into their existing lifeworld.

Relationships explored were found in their responses to how they related with other students and academic teaching staff while actions explored involved assessing their current abilities to cope effectively with the study workload.

The influence of family views on their own views represented a situation that encouraged a critical assessment of their existing psychological, socio-cultural and epistemic assumptions (Mezirow, 1991). These assumptions are founded in an individual's lifeworld and represent what values they believe identify them, how they came to have those values and why they believe those values are valid. For first year students their existing lifeworld experiences define them as a single person, a parent, or a partner. Adapting the role of being a student into these existing lifeworld identities required assessment of what the new role meant and what changes would have to be made to successfully integrate the new role. How these values were arrived at could be seen in the social influence of family values on their own views and how they positioned themselves within the new role of being a student. Epistemic assumptions were evidenced in their stated determination and commitment to be a student in order to achieve their goal of being a teacher and suggested that they believed their values were valid.

Of the students who participated in the interviews, nine reported being confident in their ability to reach their five year goal, while two reported being not confident and experiencing their confidence fluctuating as a result of adjusting to a new way of learning and questioning their own ability due to the difficulty of keeping up with the study workload. These responses were also indicative of critically reflecting on and assessing their existing abilities and how competent they felt with being able to deal with the problems that being a student presented.

However, those who reported they were confident of achieving their goal also reported being stressed by the workload, were having difficulty keeping up and were concerned that financial commitments may prevent them from completing their study. Seven of the students interviewed reported difficulties with their study. These difficulties included adjusting to the workload and style of teaching, time management, feeling overwhelmed, understanding what to study, planning study tasks and experiencing levels of stress that cause them to doubt their ability to succeed at

the course. Four students reported that they were not really having any problems, but reported that the course workload was far higher than they expected and was causing difficulty for them in managing the time required to adjust to the study load, and accommodate other lifeworld responsibilities.

These experiences were further complicated by the responsibilities of meeting financial commitments and parenting. Students who reported being confident of achieving their five year goal, also reported the same problems but believed they had the skills to develop and implement a solution that would enable them to succeed.

Trends in student confidence

There was a clear trend that extended from deriving satisfaction from study, through being confident of achieving their five year goal to reporting experiencing problems with their university study that was consistently represented by the workload being too high resulting in feelings of being overwhelmed, doubting their own ability, having difficulty comprehending and keeping up with the study material and having to adjust to these experiences while dealing with financial and parenting responsibilities. This trend is even more disturbing when one considers that only 17.6% to 31.6% of students report deriving satisfaction and an intellectual challenge from studying, while 15% to 54% of the students surveyed, including those who reported some levels of satisfaction, also report being overwhelmed and having difficulty knowing what is expected of them as learners and are experiencing difficulty comprehending and keeping up with the course study load. Students also reported that "every other student they know" is experiencing the same problems with workload, study requirements and comprehending and coping with the subject material. These responses provide further indication that students are experiencing first year study as a disorienting dilemma, (Mezirow, 1991).

In response to the question 11, do you have a plan of action for solving these problems? of the nine respondents who answered yes, the processes at work indicate that thought has been given to developing a strategy or strategies that include seeking help for health issues, maintaining focus, maintaining self-confidence and reorganising financial commitments. Hoping for the best and taking a little bit at a time were also reported as ways of dealing with the study workload. These are

indicative of some type of planning occurring, but fall short of representing a detailed strategy.

Of the responses to question 12, do you have the skills to implement a solution to your problems? eight students reported that they do or think they do. The processes at work here include, improving time management and planning skills, personal commitment, an awareness of own weaknesses, maturity, and the ability to use resources to help solve problems. The resources students described included using the library, approaching counsellors or learning advisors, the internet and seeking assistance from family members. Three students reported no or not certain in response to this question stating that stress caused by the study load and the resulting feeling of being unmotivated as the processes responsible for these views. Both question 11 and question 12 were mapped to transformational learning phase six; planning a course of action. The majority of student responses indicated that this phase of transformation was being experienced.

Two Dimensions of Transformation

The transformation experienced by first year students can be grouped into two dimensions that reflect key elements of their lifeworld that influence their adaption to the university learning environment. The first of these includes a disorienting dilemma that is the result of being overwhelmed by the workload of the course and the following phase of self-assessment and critical assessment of psychological, socio-cultural and epistemic assumptions.

The first dimension of transformation then consists of experience of a disorienting dilemma and critical reflection on the self; the attitudes, values and beliefs that form the students existing lifeworld. The nature of the disorienting dilemma reported by students required them to reflect on their expectations of tertiary study (Benson et al., 2014; Brinkworth et al., 2009; Crisp et al., 2009; McInnis & James, 1995; Scutter et al., 2011), particularly in regard to their reported difficulties with coping with the study workload. This reflection occurred as a result of the need to balance study requirements within the existing responsibilities of their lifeworld including financial, parenting and time commitments.

The reported experience of students in the current study is consistent with the findings of other studies into first year experience that found students experience first year study as a time for adjusting to the social environment of the university community of learning (Benson et al., 2014; Crisp et al., 2009; James et al., 2010; Einfalt & Turley, 2009, 2001; O'Shea, 2011). This process of social integration is necessary if students are to be able to effectively engage in discourse with peers (Cranton & Hoggan, 2012; Cranton & Carusetta, 2004; Habermas, 1984; Mezirow, 1991, 2000; Northedge, 2003) and reflect on their own experience and that of others. Reflection on their own values of what is expected of a university student and how they are able to integrate their existing assumptions of this role with the experience of finding this role to be disorienting involved consideration of their own motives for studying. Motives for studying were reported as the desire to make a contribution and work in a profession that enabled them to be a role model, as well as providing them with the financial return necessary to meet the commitments of their lifeworld. While both motives were expressed by school leavers and mature age students, the responses from mature age students showed that due to existing financial hardship incurred as a result of studying, the financial motive was a significant one for them. The difference between school leaver and mature age attitudes is reflective of their lifeworlds. School leavers generally had more financial support from family, although some did have a need to work, and suggest that the passion reported in their motives of being a role model and making a contribution is something to which they aspire in the future. Mature age students while also reporting this level of passion, however, reported it as an element of the teaching profession they were hoping to become a member of, along with the need to balance or maintain financial commitments. These commitments stem from their lifeworld experience of having already worked for many years, in some cases running their own businesses, and being aware of the need to generate sufficient income to meet existing financial commitments, from their choice of intended profession.

Motives for studying provided ground for reflection on the views of family members and the type and nature of support perceived as existing in family attitudes to the undertaking of university study. There was a diversity of family attitudes reported by students that included support for undertaking a course of study that would lead to a good profession and being supportive but concerned at their choice to incur financial

hardship while studying. This latter response was more commonly reported by mature age students, and is again reflective of the existing financial and parenting responsibilities of their lifeworld compared to the lifeworld of school leavers. The process of reflecting on their motives for study led them to consider both their own values and attitudes and those of family members and positions their motives and what they hope to gain from becoming a teacher in the context of their lifeworld.

The second dimension of transformation involved the exploration of options for new roles, relationships and actions, planning a course of action and awareness that others were experiencing the same types of problems with university study. Following a period of reflection and self-assessment learners considered how their reflections could be transferred into actions that allowed them to successfully explore new roles. This period represents a liminal or threshold space where the learner begins to understand how the limitations of their existing meaning perspective have constrained their ability to understand new experience and begin to evaluate how they can change their values to better allow them to succeed with their study.

Differences in students' lifeworlds

Students in this liminal space are in the process of developing new beliefs and attitudes that lead to a transformation of their existing meaning perspective (Mezirow, 1991, 2003). The reported experiences of students in this study emphasised the need they have to "...generate beliefs and opinions that will prove more true or justified to guide action" (Mezirow, 2003, p. 59). Their reported aims of wanting to be a teacher or engaged in other work such as counselling or mentoring in five years' time and how they could get there are indicative of their need to arrive at a course of action that will bring them success in achieving their aims for the future.

Achieving that course of action was dependent on their being able to identify the elements of first year study that they were having difficulty with. Once these areas were identified, problems were expressed clearly in their responses as time management, difficulty coping with the study workload and for many the financial cost of university study. Deciding on a course of action was revealed in the responses that identified a need to improve their time management and increase the amount of time devoted to study. These courses of action were the most frequently reported as

the areas in which students felt their existing skills needed to be improved if they were to be able to successfully complete first year study. This represented an area where their existing lifeworld was not adequate preparation for the demands of university study. School leavers typically found a need to develop time management and prioritising skills while mature age students typically found a need to improve their existing skills, citing life experience as an essential element of their being successful at study. The difference in lifeworld experience was an important element in determination of a course of action and how to go about putting that course of action into practice by using existing skills and knowledge. Awareness that other students were experiencing the same difficulties was an important phase of transformation as it allowed students to reflect on their own experience and that of others. This shared experience allowed recognition that others were not only experiencing the same problems, but that there were ways to solve these problems that required developing new life skills or improving existing ones. It is through this understanding of a shared experience that they were able to begin to reflect further on their own values for being at university and develop an understanding of how other students were dealing with the same experience.

The implication here for educators (Andrews, 2005; Arvanitakis, 2014; Cranton, 1995, 2002; Cranton & Caruserta, 2004; Cranton & Hoggan, 2012; Lizzio & Wilson, 2005; Robertson, 1996) is the need to be able to identify when students are experiencing this threshold space and provide the type of instruction that will most benefit them in developing the skills they need to be successful with future study (Gravett & Peterson, 2004). Students reported that the skills they most need to effectively deal with study requirements were time management, planning and prioritising skills.

The phases of transformation of a disorienting dilemma, self-examination with feelings of guilt and shame and critical assessment of psychological, socio-cultural and epistemic needs reported by 54% of students surveyed and interviewed can be seen as an integral part of their desires to achieve the upper levels of Maslow's (1946) hierarchy of needs. However, while these transformative phases are correlated with identified at risk behaviour, when viewed as phases to be negotiated in order to

achieve growth needs they can be seen as experience that is also necessary for students to have as they reflect on their progress toward their goals.

This is not to say that at risk behaviour is acceptable in the long term, but rather that it can be a consequence of undertaking a new and challenging endeavour. The implication for the university that arises from this interpretation is the need to understand the nature of at risk behaviour in students and provide instruction that specifically targets those behaviours. According to Taylor "self-management and planning — as a specific objective is one the students most often identify as missing from their battery of skills" (2007, p. 10).

As has been discussed earlier, this requires students to have instruction in time management, planning and prioritising skills if they are to successfully meet the challenges they experience as first year students.

Institutional Impact

The extent to which any given institution can support its students and staff is limited due to a reducing funding base (Group of 8, 2011; Lomax-Smith at al., 2011). While student retention continues to be a key driver in the design and execution of institutional policy and practice the figures for retention show very little improvement from 2001 to 2010 (McKenzie & Schweitzer 2001; McInnis, 2001, McInnis & James 1995; James, et al, 2010; Phillimore & Koshy, 2010). Furthermore the percentage enrolment of students from low SES backgrounds has remained at 16% in Western Australia (Phillimore & Koshy, 2010). Examination of the retention figures for Western Australian Universities (DIIRSTE, 2012) show at best a 0. 8% increase in student retention for University 4 and 0.4% increase for University 2 while University 1 shows a decrease of 1.5% and University 3 reports a 3.6% decrease for the period 2001 to 2010.

The contemporary values placed on institutions through social and industry expectations of what university graduates should be able to do places institutions and educators in a difficult role (McKenna, 2012; Walker-Gibbs, 2008). Finding funds to implement new teaching strategies is difficult and depends on the geographic location of the institute and other contextual influences (Crosling, 2009; Krause 2011; Devlin

et al., 2009). With the current Abbott Liberal Commonwealth Government foreshadowing major changes in the way universities operate that will see increasing costs passed onto students, the ability of universities to maintain existing infrastructure and where possible embrace new technologies will become harder (Dawkins, 2014; Zepke, 2014). The proposed student loan structure will see student loans accruing interest from the day they commence their course. The greatest effect of the proposed changes will likely be borne by students from low SES backgrounds as these students are typically averse to accruing debt. There is, therefore, a major issue surrounding student equity that to date has not been resolved (Dawkins, 2014).

The financial stability of an institution affects the extent to which improvements can be made in learning, teaching and assessment, practice that can best address the needs of an increasingly diverse student body (Devlin et al., 2009; Zepke, 2014). The extent to which academic teaching staff can obtain funding to implement teaching, learning and assessment practice that treats all members of a diverse student cohort equitably is also limited by a decreasing funding base. It is also necessary for individual institutions to be able to contextualise their teaching and learning assessment practice based on their geographic location and the percentage of students from low SES standing in their location. A case that amply demonstrates this point is the geographic and demographic differences between Western Australian universities and the University of Tasmania. ABS (2012) figures reveal that Tasmania has 54% of low SES areas compared to Western Australia that only has 19.2% of low SES areas. It is hardly surprising then that University of Tasmania has nearly 30% of commencing undergraduates from low SES backgrounds while Western Australian universities only have 11.2% commencing undergraduates from low SES backgrounds (ABS, 2012).

Given that factors affecting student engagement and hence student retention are multifaceted (Arvanitakis, 2014; Crosling, et al, 2009; James et al., 2010; Krause 2011; Walker-Gibbs, 2008) the quantitative analysis of retention figures does not provide meaningful data for academic teaching, learning and assessment staff to develop programs that may better match the level of student diversity present in their institution. Walker-Gibbs (2008) illustrates this issue by arguing that creative and critical thinking are both necessary considerations in how Australia is going to

maintain a competitive presence in the creative global knowledge market (OECD, 2010). Additionally The Melbourne Report (2008) emphasises the need for education to instil in students the need to be a lifelong learner and that they also need to further their education by pursuing higher education at either TAFE colleges or university study. This is also an important consideration in improving intergenerational mobility (OECD, 2012).

As has been demonstrated in the review of literature in the current study student expectations of what university study will entail in fact do not accurately reflect the actual requirements of commencing undergraduate study (Brinkworth et al; 2009; Crisp et al., 2009; Scutter et al., 2011; O'Shea, 2011). Findings from the current study also illustrate the disparate nature of commencing students expectations of university study and the amount of time they will need to invest in the student centred university learning environment if they are to succeed academically in their first year of study. This is most notable in the student vignettes where several students claimed no one told them how much work would be involved. This situation could be avoided if orientation programs operated for two weeks instead of one. This would allow students to be informed of the workload and the types of academic support available to them (Krause, 2011).

Adaptive Transformation for Commencing Pre-Service Teachers

As the current study only operated for the first four weeks of semester one, 2012 so as to gather information about students experience at this critical time of adjustment developing a transformative model that could maintain its relevance for students at the end of the semester is untenable (Crosling et al., 2009; James et al., 2010; Krause, 2011; Lizzio & Wilson; Taylor 2007; Willis 2007). It is, however, argued that the richness of the data gathered in the current study can reliably be synthesised into a shorter transformative theory that permits understanding of student behaviour during this time. The name given to this transformative theory is Adaptive Transformation for Commencing Pre-Service Teachers.

The data gathered from section two, comprehending and coping, of the online survey and the responses provided by the students who partook in the interviews provide insight into the stages of transformation of meaning schemes and suggest a model of transformational learning for commencing pre-service teachers. The next part of this discussion will provide detail for the arrival at a six phase adaptive transformation model for pre-service teachers.

Developing the model

To develop an effective model requires placing reported student experience within a modified frame work of Mezirow's (1991) phase of transformational learning. This has already been done by Cranton (2002) and Gravett (2004) on the basis of student groups they studied. There are many similarities to Mezirow's original phases in Canton's (2002) and Gravett's (2004) phases of transformational learning but significant variations are also present to better represent the cohort studied, with these variations representing changing interpretations over a 24 to 26 year period. This is acceptable as Mezirow (1978, 1991) has always regarded his theory of transformational learning as an evolving one which is an aspect of his theory that continues to make it relevant to adult education to this day (Benson et al., 2014; Taylor 2000, 2007).

It is important to note that B.Ed-P students elected to enrol by their own choice, not as an unforseen abrupt situation such the loss of a loved one or loss of career, and they are not required by law to attend university as they are for primary school and secondary school. Indeed the data in the current study reveals many reasons why students chose to enrol, from passion to be a teacher, the desire for a career change and the belief that teaching would offer them a profession with good personal and financial reward (Benson et al., 2014; Crosling et al., 2009; James et al., 2010; Krause, 201; Walker –Gibbs, 2008). This decision was typically made some time before enrolment and presumably involved discussion with family members as students reported that family values were very important to them. Of the 11 students interviewed six reported that their family values supported their own views while four reported their family values caused them to reflect on their own values. This represents an informal example of discourse as learning (Mezirow, 2003). Only one student reported that her family values had no meaning for her and that she was going to do what she wanted whether her family agreed or not. Therefore, a degree of critical reflection and discourse was undertaken by students before they enrolled in

the B.Ed-P course, and before they commenced study at university. It is likely at this stage that they developed expectations of what university study would entail (Brinkworth et al., 2009; Crisp et al., 2009, James et al., 2010). This phase is expressed as:

Deciding on a course of action that will lead to a better career and engaging in discourse with family members to validate that choice of action before commencing.

The next phase of the model will deal with student's awareness that their previously held expectations of university study are frequently very different to the expectations university places on them when they start their course of study. (Brinkworth et al; 2009; Crisp et al., 2009; Hillman, 2005; Scutter et al., 2011; O'Shea, 2011). This disparity between expectations and actual experience could be overcome or at least alleviated to a significant extent if orientation was carried out over two weeks, instead of one, with the first week conducted in part in the students' home to better prepare them for what lays ahead of them when they start studying (Krause, 2011). This approach would also aid in sending a clear signal to students that the university does indeed value them and does not want them to feel alone or rejected once they attend classes (Crosling et al., 2009; Krause, 2011).

While university students must learn to take responsibility for their own learning expecting that they can do this from the day they start is at best naive and worst setting them up for failure (Hillman, 2006; Lizzio & Wilson, 2005; Northedge 2003). Expecting new students to be able to readily identify their role as a student in this new learning environment also sets up major conflicts with their existing ways of knowing, doing and interaction with others. Not all students want or need a close affiliation with the university (Northedge, 2003; O'Shea, 2011).

This phase is expressed as:

Recognising that existing expectations do not accurately describe the student centred learning environment.

The next phase then requires a student to identify the elements of their prior expectations' and how they differ from the expectations they are experiencing as a commencing student (Einfalt &Turley, 2009; Paavola et al., 2004; Walck &Hensby, 2003). This typically is a prelude to realizing they need to discuss their ideas with other students who are feeling the same way (Cranton, 2002; Cranton & Hoggan, 2012; Crosling et al., 2009; Habermas, 1984; Mezirow, 1991; Walker Gibbs, 2008).

This phase is described as:

Within an already busy lifeworld of personal, social, family, childcare and financial commitments, adapting to university study requires an investment of more time than was thought necessary.

The high volume of academic work required is just one facet of a multi faceted lifeworld whose commitments cannot simply be put on hold while one studies (Crosling et al., 2009; Willis, 2007; O'Shea, 2011; Vivekananda &Shores, 1996). Since mature age students and school leavers found the academic study load far heavier than they anticipated, they are clearly suffering from a lack of effective time management and prioritising skills (Taylor, 2000, 2007). One mature age student said that no one informed them how much work was involved while one school leaver said that every other student she knew was also battling to keep up with the academic work load.

This phase is described as:

Discourse with peers reveals that others are sharing the same problems and that working on problems in small teams is more effective that trying to solve problems on one's own.

The last two phases draw on the interview responses provided to interview question 11 and interview question 12. Question 11 asks if you have a plan for dealing with these problems. By looking at Table 4.11 it can be seen that 10 out of the 11 interviewees responded yes with the remaining one saying no. Cleary then the majority of students interviewed had a plan formulated for dealing with the heavy academic study load and for mature age students plans to reorganise their lifeworlds

to better fit their study responsibilities. However the response to question 12, do you have the skills to implement the plan reveals that only four students answered yes, four said they thought they did while three said no. This response begs the question as to what sort of plan, 10 of the 11 students had when only four believe they have the skills to carry it out, four think they might be able to carry it out and three answered no.

The answer may lie in Table 4.8 (page 110) which shows the highest correlations of all section two survey results. In this table, comprehending and coping, students reported they found it really hard to keep up with the workload, had difficulty comprehending the material they were supposed to study and felt overwhelmed by all they had to do. It is reasonable to expect that in such an overloaded state students may find it difficult to dedicate thought to a course of action that could improve their situation but instead are focussed on just getting the work done however they can.

This phase is described as:

Recognition that the learning environment of the university requires students to transform their perception of themselves as a learner if they are to improve their comprehension of the course material and that they need to spend more time in private study if they wish to overcome feelings of being overwhelmed.

The final phase of adaptive transformation requires a student to understand that a transformation of their existing attitudes, values and beliefs is necessary (Mezirow, 1991; Cranton, 2002; Cranton and Carusetta, 2004; Gravett 2004) if they are to succeed academically and begin to explore options for new roles, relationships and action. This phase is described as:

A realisation that a transformative experience is necessary if one is going to progress to new roles, relationships and actions.

Table 5.1 lists the phases of Adaptive Transformation. Each phase describes a type of transformational learning that may be experienced by commencing pre-service teachers. With the exception of phase one, it is not necessary for a student to experience every phase nor is the order in which they experience them important.

Phases of Adaptive Transformation

- 1 Deciding on a course of action that will lead to a better career and engaging in discourse with family members to validate that choice of action before commencing.
- 2 Recognising that existing expectations do not accurately describe the student centered learning environment.
- 3 Within an already busy lifeworld of personal, social, family, childcare and financial commitments, adapting to university study requires an investment of more time than was thought necessary.
- 4 Discourse with peers' reveals that others are sharing the same problems and that working on problems in small teams is more effective that trying to solve problems on one's own.
- 5 Recognition that the learning environment of the university requires students to transform their perception of themselves as a learner if they are to improve their comprehension of the course material and that they need to spend more time in private study if they wish to overcome feelings of being overwhelmed.
- 6 A realisation that a transformative experience is necessary if one is going to progress to new roles, relationships and actions.

Phase one represents a common starting point for students commencing the B.Ed-P course of study. Responses to the interview questions in the current study show that 10 students out of the 11 interviewed had determined to become a Primary teacher prior to commencing the course. They also reported that value was placed in their families' advice and support. Some had arrived at this decision as it offered them a better career than they presently had. Others were motivated by their passion for becoming a teacher. In all cases there had been some degree of dialogue with parents, other family members, or friends before they enrolled. As such this first stage may have provided some students with a need to personally reflect on their decision to become a Primary teacher but in and of itself it is not necessarily a disorienting dilemma (Mezirow, 1991). Commencing B.Ed-P students consistently report that the study workload they encountered once they had commenced the B.Ed-P course was

the greatest problem they faced. Therefore, the experience of a disorienting dilemma does not occur until they begin study. This is acknowledged in phase two of the current model.

Phase two acknowledges that students' perceptions and expectations about what university will require them to do as learners are frequently different to the reality of tertiary study. Recognising this disparity between prior held beliefs and expectations and the actual requirements of being a self directed learner in a university environment is for many students a time of uncertainty and conflict as they try to adapt to a new type of learning. For B.Ed-P students Mezirow's (1991) description of a disorienting dilemma occurs at some time after they made their decision to become a Primary teacher. This is an example of transformational learning experiences that do not occur as the result of a dramatic change such as death of a loved one or loss of a career. Rather the transformational experience occurs later following a decision to embark on a course of study. This is not to say that the problems students report at this time are any less a disorienting dilemma, but serves to indicate that transformational learning can occur at different phases throughout the process of seeking out new roles, relationships and actions. (Arvanitakis, 2014; Brinkworth et al; 2009; Crisp et al., 2009; Crosling et al., 2009; Hillman, 2005; Krause, 2011; Mezirow, 1998; Scutter et al., 2011; O'Shea, 2011).

Phase three represents what many students experience, in not being aware of the amount of private time they need to spend in study if they are to succeed academically in their chosen course of study. This results in a reorganisation of the activities and responsibilities of B.Ed-P students existing lifeworld to accommodate the hours of study required. For many students this reorganisation requires them to fore go social, family, or financial activities and typically introduces an initial level of discomfort as they confront deeply held beliefs that may not have been called in to question in previous situations. Phase four represents the need to be engaged in dialogue with other students, thereby realising that others are negotiating similar problems. As a result they can become aware of how other students are dealing with the problems and that often a small group can provide answers that can elude an individual. This is an essential component of communicative learning since it provides students with an opportunity to engage in discourse with their peers and assess the validity of what is being said (Benson et al., 2014; Habermas, 1984, Mezirow, 1991, 1998). It also

provides a time when students need to decide whether solutions provided by their peers are indeed suitable as a solution for their own problems with regard to coping with the academic workload.

Phase five describes the need for a realisation on the part of students that changes in their prior attitudes, values, and beliefs are necessary if they are to adapt successfully to the university learning environment. In particular this phase acknowledges the need for students to redefine their own view of what being a student entails, including the expectations and responsibilities that the university has of them as learners. In practice this typically involves students in understanding the need to spend some of their private time in study as well as adapting to the community of learning that characterises university study (Arvanitakis, 2014; Brinkworth et al., 2009; Crisp et al., 2009; Crosling et al., 2009; Hillman, 2005; Krause, 2011; O'Shea, 2011; Paavola et al., 2004; Scutter et al., 2011; Walker-Gibbs, 2008).

Phase six places that change in a transformational learning context and further describes it as a necessary experience when adapting to a new role that can also allow the development of new relationships and actions. For B.Ed-P students this involves establishing relationships with other students and academic staff as part of the necessary changes they must adapt to in a new and unfamiliar learning environment (Arvanitakis, 2014; Benson et al., 2014; Brinkworth et al; 2009; Cranton, 2002; Cranton and Carusetta, 2004; Gravett 2004; Mezirow, 1991).

Summary

The discussions presented in the current chapter have focussed on the difficulties reported by commencing pre-service teachers as they undertake their study in the university learning environment and contextualises those difficulties within a transformational learning paradigm. Most notable of these difficulties are coping with the academic study load, comprehending the study material and finding time to accommodate study time into an already busy lifeworld. Mature age students also reported that meeting financial commitments was a major concern for them. However, they typically reported that their own life skills and maturity would allow them to develop effective strategies for dealing with these difficulties. For some, organising child care was also a problem impacting their ability to accommodate the necessary

time needed to attend lectures and tutorials on campus. This drawing on life experience to solve problems in a new environment was not reported by school leavers. Mature age students then have experience at negotiating new situations and being able to adapt to them with a degree of confidence founded in their prior lifeworld.

School leavers, in contrast, reported far less concern with financial and child care demands, but were overwhelmed by the academic study load and in many cases lacked the skills to plan effective strategies for dealing with it. This left some school leavers feeling unable to cope with the study load and consider that they may fail as a result. Time management and planning skills emerged as the main area of difficulty for both mature age students and school leavers and suggests that educators need to be aware of these difficulties and provide instruction in planning and prioritising study load if students are to feel better able to cope with studying.

Two clear aspects of transformational learning were identified as occurring for commencing students. The first of these was represented by the phases of transformational learning requiring students to deal with a disorienting dilemma and a need for critical reflection on their existing attitudes, values and beliefs as a result of having made a decision to become a Primary teacher and engaging in a course of study that can see them achieve that goal. The second aspect dealt with exploration of options for new roles, understanding that other students were facing the same difficulties and being able to plan a new course of action. It is at this stage that students typically engage in communicative learning and a sharing of knowledge with their peers about how best to deal with the problems facing them. This sharing of knowledge promotes a sense of community adding an important dimension to their learning experience.

Chapter Six - Recommendations and Conclusions

Higher education in Australia continues to grow with increasing numbers of commencing undergraduates each year. Following the recommendations of the Bradley review (Bradley et al., 2008) universities have increased student enrolments (Arvanitakis, 2014; Dobson, 2001; Gale, 2009; Phillimore & Koshy, 2010) from low SES and underrepresented backgrounds. The increase in first year student numbers has been paralleled by the numbers of students being enrolled from low SES and underrepresented groups such that the percentage of these students making up the first year cohort has remained constant over the last decade (Phillimore & Koshy, 2010). The increasing cultural and social diversity of B.Ed-P students has brought with it a need to adapt teaching and learning practice to be more inclusive of student background and to better understand the influence of background on student engagement with, and participation in, the learning environment that characterises first year university study (Crosling et al., 2009; Devlin et al., 2009; Walker-Gibbs, 2008).

Higher education allows increasing social and professional mobility (OECD, 2010) of a country's population and is necessary if Australia is to be an effective competitor in a growing knowledge based global economy where creative thinking has as large a part to play as critical thinking (McKenna, 2012; Walker-Gibbs, 2008). It is therefore necessary to recognise the synergy that exists between creative thinking, critical thinking and learning. The most basic example of this synergy can be considered in terms of creativity identifying a product or process that can be an income generating commodity, the knowledge that creativity represents and thereby providing academic teaching staff to provide learning opportunities that encourage students to understand the importance of creativity. Higher education has a crucial role to play in Australia's efforts to be competitive in this environment by graduating students that have the academic, creative and social skills to engage with a diverse worldwide economy.

The Experiences of Commencing First Year Students

Students were motivated to obtain a degree in order to pursue their ambition of being a teacher and placed great value on education, seeing it as a profession where they could make a good living in an environment that allows them to act on their values of making a contribution and being a role model. They also had strong support from their families for their chosen course of study. However, they reported difficulty with comprehending and coping with the demands of academic study and finding time for study while coping with external issues of financial, parenting and time management responsibilities.

Students' experiences were a complex mixture of competing demands comprised of academic study, time management, planning and prioritising, and for some, financial commitments and parenting commitments that caused them to reflect on their existing values and beliefs that shaped their expectations of the experience of being a university student. Existing attitudes to the amount of time required to effectively undertake tertiary study were found to be inadequate for effective engagement with the study workload. The process of reflection caused them to re-evaluate their position as first year learners in the broader university community. In turn, this reflective process resulted in adjustment to the learning demands of university study and adapting the study and learning demands to their lifeworlds. Studying is not isolated from other life demands and responsibilities. The use of transformational learning theory (Mezirow, 1991) has permitted interpreting these experiences in terms of a student's ability to reflect on the nature of constraint that their existing attitudes, values and assumptions place on their ability to engage with a new course of study.

The Transformative Nature of First Year Experience

Findings from the current study have shown that B.Ed-P students experienced a transformation of their existing lifeworld values as they integrated those values with their need to adapt to the learning culture and content of first year university study. The transformation led to a more integrated view of what it was to be a university student and guided new thought and action. There were two main dimensions of transformation occurring for first year students as they adapted to the learning environment and the nature of university study.

The first of these consisted of experiencing study as a time when existing attitudes and beliefs were insufficient to permit a clear understanding of the requirements of tertiary study and the behaviour necessary to succeed academically. Finding time to accommodate study needs while meeting existing responsibilities was difficult for

school leavers and mature age students alike. School leavers found that the amount of time required for first year study was a limiting factor in how much paid work they could do before work commitments began to impact on their study efforts. For some this was not a major concern as their parents were able to provide financial support while they were studying while others made do with reduced work hours or part time employment.

Mature age students were attempting to incorporate study demands with meeting existing financial commitments of providing support for their own families and meeting the financial demands of housing payments and maintaining small business ventures. These students depended on the income from spouse or partners and regarded that this was not acceptable in the long term, but was necessary in order to gain the qualifications necessary to allow them to change their career. Some mature age students were also single parents and this placed further limitations on the time they were able to devote to study. For both school leavers and mature age students the first year learning experience was a disorienting dilemma that required them to reevaluate other aspects of their lives in order to find the time necessary to succeed with their academic pursuits. This dilemma led to a critical reflection of existing attitudes and beliefs about tertiary study and recognition that a change in those beliefs was necessary for successful completion of first year study. Further transformation, following the recognition that first year study was a difficult and disorienting time, was evidenced in student responses that they were doubting their ability to complete the course and that this was causing them to lose confidence in their ability to achieve their goal of completing first year study. These feelings corresponded to the transformational learning phase of self-assessment with feelings of guilt or shame. Guilt and shame were manifest in regret that they may not be able to succeed with achieving their aims of becoming a teacher.

The transformational learning phase of critically assessing existing psychological, socio-cultural or epistemic assumptions completes the first dimension of transformation experienced by students and was reflected in their responses that showed they were questioning how they saw themselves as first year learners and the reasons why they had undertaken first year study. This period of critical reflection saw them examining their existing attitudes and beliefs about their own ability to

succeed as a first year student and the value they placed in their families attitudes to their decision to undertake university study. The majority of students felt that family attitude and support were significant to them achieving their own goals of completing their course of study and becoming a teacher. Reflection in this context evidenced the epistemic nature of existing knowledge and how it was acquired.

These three stages of transformational learning occurred for 54% of students surveyed. The competing demands of study, finance and parenting were also reflected in their responses to the interview questions where they again responded that they were having trouble keeping up with the study workload; the level of study required and were having difficulty comprehending the study material.

The second dimension of transformative experience, reported by between 15% and 30% of students, was that of exploring options for new roles, relationships and actions and provisional trying of new roles. These phases of transformational learning were evidenced in responses that showed students were gaining satisfaction from their study, that they found studying the subject material intellectually stimulating and that their lecturers sometimes stimulated their interest in the topics. While all students reported difficulty with managing the study workload many also saw their time at university as an opportunity to explore new roles with other students and further reflect on their own role of being a student. The opportunity to complete first year study and then progress to graduation and then to being a teacher was also a new role for students. For school leavers this role represented their first in a professional working capacity whereas for mature age students the role of being a teacher was one that represented a significant change in their lifeworld.

The interview responses also showed that some experienced an additional transformative phase, planning a course of action, to deal with the study workload requirements but some lacked the time management and planning skills to do so effectively. Students in this category also reported that the course workload was too high and that they had trouble comprehending and coping with the study material as well as difficulty with managing their time and planning and prioritising their study commitments with whole of life commitments that included financial and parenting responsibilities.

Student experience of first year university study then can be described as one that provides intellectual challenge and satisfaction but is difficult for students to adjust to in terms of the workload expected and managing that workload with other life commitments. This dilemma caused them to assess and reflect on their abilities to successfully complete the course. School leavers showed mixed levels of being able to plan a course of action that would allow them to cope with study needs. Their responses ranged from organising their time to using lists and increasing their time in private study to simply waiting and seeing what would happen as the semester continued on. Mature age students, on the other hand, had better strategies for dealing with the problem of study workload and frequently reported that their own life experience and maturity gave them the ability to feel confident with being able to adjust to and cope with the demands of university study.

As has been consistently reported in the current study the high number of students experiencing at risk behaviour (James et al., 2010) is cause for concern to all universities across Australia as they seek to meet equity requirements (Gale, 2009) and greater representation of low SES and at risk groups (Bradley et al., 2008), resulting in an increasingly diverse student cohort. Within any given university the concern for improving student retention is shared by individual faculties and schools.

For the School of Education associated with this study results suggest strongly that improvements could be made in student retention by providing instruction in time management, planning and prioritising skills. With 54% of students reporting being overwhelmed by course workload, having difficulty keeping up with and understanding the course material and further reporting that they do not have the time management and planning skills to effectively cope with study, then any improvements that could be made have the potential to improve student retention.

Furthermore, the nature of transformation accompanying these at risk behaviours suggests that students are in a reflective threshold or liminal space (Gravett & Petersen, 2002) where their attitudes, values and beliefs toward study require them to reassess their initial expectations of tertiary learning. One possible way of assisting them at this stage would be to provide reflective tasks or assignments that provide them with an opportunity to write about their experience of first year study, thereby giving voice (Freier, 1972; Gravett & Petersen, 2002; Mezirow 1991, 2003; Willis,

2007) to their concerns and promoting an environment of mutual respect where rational discourse (Habermas, 1984) can be engaged in to arrive at a consensual validation of problems and a further understanding of differing world views.

Evidence of Transformational Learning

The study provided significant evidence for transformational learning occurring for first year B.Ed-P students. Pearson correlations have shown that 54% of students were experiencing the first three phases (Mezirow, 1991) of transformational learning. This group reported their first year experience as one that causes:

- 1. Phase One A disorienting dilemma.
- 2. Phase Two Self-assessment with feelings of doubt and shame; and
- 3. Phase Three A critical assessment of psychological, socio-cultural and epistemic assumptions.

These experiences resulted in self-assessment and critical assessment of their attitudes, values, beliefs and assumptions and are reported in the context of being overwhelmed by the workload and having difficulty planning and prioritising their study causing them to lose confidence in their ability to complete their course of study.

Of this group 15% to 30% also reported experiencing:

- 1. Phase Four Recognition that one's discontent and the process of transformation are shared, and that others have negotiated a similar change.
- 2. Phase Five Exploration of options for new roles, relationships and actions.
- 3. Phase Six Planning a course of action.
- 4. Phase Seven Acquisition of knowledge and skills for implementing ones plans; and
- 5. Phase Eight Provisional trying of new roles.

Seven out of 11 interview responses showed that while students were confident they could deal with the demands of the first three stages, they were concerned by the high workload of the course and that this was making study difficult to accomplish within

their broader lifeworld. In some cases financial and parenting commitments were reported as causing them to doubt if they would be able to continue studying while in other cases difficulty coping with and comprehending the study material was the main source of their doubt as to whether they would be successful at their study.

Supporting Transformational Learning

The evidence of transformational learning suggests a trend for the need for transformational learning activities in first year study that could provide students with assistance in better understanding why they were having trouble comprehending and coping with the study material and assist with developing their time management, planning and prioritising skills. These activities could involve small group work dealing with time management and planning and require students to write a personal reflection on their experiences and the experiences of other members of the group. The act of writing a personal reflection would provide them with the opportunity to position their own reflections in the broader context of the group and assist them in understanding how to better manage and prioritise their time. Interview responses have shown that students were aware that other students were sharing the same dilemmas as themselves as they negotiated adjusting to the demands of first year study.

Reflective writing has the potential (Gravett & Petersen, 2002; Mezirow, 1991, 2003; Willis, 2007), to allow students to better understand their own attitudes, values and beliefs in relation to those who are experiencing the same dilemma in adjusting to first year university study and brings with it an understanding that there is a need to change and that the change must begin with reflecting on one's own assumptions.

Review of Research Questions

The first question posed for the current study was: How do pre-service B.Ed-P teachers experience their first year at higher education?

The findings of the current study demonstrate that pre-service teachers experience their first year of higher education as one that causes them to reflect on their difficulties comprehending and coping with study material as they try and adapt study

requirements, with limited time management and planning skills, to life responsibilities including financial and parenting needs. These difficulties cause them to doubt their ability to complete their first year of study.

The second question posed for this study was: What evidence of transformational learning exists for first year education students engaged in a university undergraduate degree?

The current study has provided substantial evidence of transformational learning with 54% of students reporting experiencing first year study as causing a disorienting dilemma that causes them to assess and critically reflect on their attitudes, beliefs, values and assumptions. Of this number, between 15% and 30% report they are also exploring options for new roles, relationships and actions, provisional trying of these roles, planning a course of action, and acquiring knowledge and skills for implementing ones plans.

The third question posed by this study was: Does the evidence suggest a trend or model for transformative learning on first year education B.Ed-P entry to university?

The findings from this study suggest that a trend for transformative learning on first year B.Ed-P education entry to university exists, and that this trend occurs as a result of the disorientation, self-assessment, as well as the critical assessment students experience as they adapt to the requirements of first year study. In a climate of lifelong learning the first year experience was significant in providing ongoing development of student's attitudes, values and beliefs. The reflection upon existing beliefs and the transformation of these beliefs to better engage with the learning experience positions first year study as a time when students become aware of what being a learner requires of them and how they adapt to meet those requirements.

Recommendations

The findings of this study have shown that first year B.Ed-P students experience difficulty with comprehending and coping with the study material. This difficulty is due to the workload of the course being too high and that they do not have sufficient time management and planning skills to cope with adapting study requirements to

other life commitments. While this was more noticeable among school leavers it is important to consider that mature age students also regarded that the course workload was too high.

It is, therefore, recommended that upon entry to B.Ed-P university study, students be given tasks or activities using small group work and reflective writing tasks to better understand the time management and planning skills that are necessary for successful completion of first year study. Reflective writing tasks would assist in allowing them to better understand the importance of time management and planning skills while positioning themselves with respect to the experiences of other students. This would permit them to understand that other students need these skills as well and that others share their transformative journey.

Responses gathered in this study show that time management and planning skills are those most needed by students if they are to be successful in their first year of study. Providing tasks and activities that assist in developing these skills would, therefore, decrease the likelihood of students lacking confidence in completing the course due to not being able to manage the study workload.

While the B.Ed-P students reported difficulty with coping with the study material, less than 15% reported approaching academic staff for study assistance. They also reported a more supportive relationship with tutors than lecturers, learning advisors and other students. This was likely due to their spending the greater percentage of their study time in tutorials and benefiting from the small group and one to one assistance that characterise tutorial practice. On the basis of these findings it is recommended that learning advisors be allowed to conduct time management and reflective writing classes upon student entry to first year study. This would allow students to establish closer relations with learning advisors and as a result become familiar with the extensive academic help that is available and who to approach when in need of this help.

These recommendations have the potential to decrease the number of students who are suffering a lack of self-confidence and as a result doubting their ability to complete their first year studies. The composition of the first year cohort shows a great level of diversity in students' prior educational experience. This in turn affects

their ability to engage with the academic discourse practiced in university study making it difficult for students to engage with and understand the types of learning experiences provided.

In turn these recommendations have the potential to increase retention in first year B.Ed-P students by providing them with the time management and planning skills needed for successful first year study while providing them with greater access to academic assistance with study problems.

Conclusion

Adopting transformational learning theory as the theoretical framework for the current study has permitted a valuable insight into the manner in which commencing first year students experience learning at a university. The mapping of survey and interview questions to phases of transformational learning revealed consistencies in student responses to become evident. The survey revealed that over half of the students enrolled experienced some difficulty with coping with the academic study load. Analysis of the interview questions revealed more detail about the difficulties experienced. Among these, planning and time management and the need to undertake paid employment emerged as key issues impacting students' abilities to adapt to the university style of teaching. The analyses undertaken also provided insight for educators and offered suggestions as to how educators may adopt transformational learning theory as a key component in first year course design and delivery.

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Appendix A - Exploring First Year Student Learning Research Project

Survey Questions

The purpose of this project is to understand in greater depth the experience of first year students. This survey is voluntary and anonymous. Please do not put your name on this form.

Section 1 - About you

Answer the following questions by placing a circle around the correct response and providing a written answer in the spaces provided.

| Question 1. | What is your gender? | | Male | F | emale | |
|-------------|---------------------------|---------------|---------------------|----------|---------|---|
| Question 2. | In what year were you be | orn? | | | | |
| Question 3. | What is the postcode wh | ere you liv | e? | | _ | |
| Question 4. | What is the principal lan | | • | | te | |
| Question 5. | What was the last educat | tional instit | ute you attended? | | | |
| And th | e level you achieved. | | | | | |
| | Secondary School: | | Year 10 | Year 11 | Year 12 | |
| | TAFE: University | Cert 1 | Cert II | Cert III | Cert IV | |
| briefly | Other - Please describe | | | | | |
| Question 6. | Are you the first person | in your fan | nily to attend univ | ersity? | Yes | N |

| Question 8. | If you answered | l yes, how ma | ny hours pe | r week do | you work | .? | | |
|----------------|----------------------------------|----------------|---------------|--------------|-------------------|---------------------|---------|----------|
| | Less than 5 | 5-10 | 10-15 | 15-20 | | | | |
| | 20- 25 | 25-30 | 35-40 | More than | 40 | | | |
| Question 9. | Do you have to | arrange child | care to stud | ly this cour | rse? | | Yes | No |
| Question 10. | How long does | it take you to | travel from | home to ur | niversity? | , | | |
| | 10 mins 20 min | as 30 mins 40 | mins 50 m | nins | | 60 mins | | |
| | If greater than 6 | 60 minutes ple | ase specify | | | _ | | |
| | Question 11. drive my own | I mainly us | - | - | Yes ther pleas | No se specify | Or, I n | nainly |
| Question 12. | Do you have ac | cess to a comp | puter for stu | ıdy purpose | es where | you live? | Yes | No |
| Question 13. | What type of co | omputer is it? | | | | | | |
| | Laptop Deskto | op No | otebook | Tablet | | | | |
| Question 14. D | o you have acces | s to a compute | er for study | purposes a | t universi | ty? | Yes | No |
| Question 15. | What type of co | omputer is it? | | | | | | |
| | Laptop Deskto | op No | otebook | Tablet | | | | |
| | Question 16. live? | Do you hav | ve access to | a broadban | | t connecti Yes N | | ere you |
| | Question 17. to university wi | • | a Laptop, N | Notebook or | r Tablet c | computer | do you | bring it |
| Question 18. | Do you have ac | cess to your o | wn quiet st | udy space v | where you | ı live? | Yes | No |

Section 2 - About your study

Answer the following questions by placing a tick in the box that best describes your answer.

| Questions | SD | D | MD | MA | A | SA |
|-----------------------------------------------------|----|---|----|----|---|----|
| 19. The lectures often stimulate my interest in | | | | | | |
| the subjects. | | | | | | |
| 20. I enjoy the intellectual challenge of the | | | | | | |
| subjects I am studying. | | | | | | |
| 21. I get a lot of satisfaction from studying. | | | | | | |
| 22. I really like being a university student. | | | | | | |
| 23. University hasn't lived up to my | | | | | | |
| expectations. | | | | | | |
| 24. I find it difficult to get myself motivated to | | | | | | |
| study. | | | | | | |
| 25. I regularly seek the advice and assistance of | | | | | | |
| the teaching staff. | | | | | | |
| 26. I find it really hard to keep up with the | | | | | | |
| volume of work in this course. | | | | | | |
| 27. I feel overwhelmed by all I have to do. | | | | | | |
| 28. My course workload is too heavy. | | | | | | |
| 29. I find it difficult to comprehend a lot of the | | | | | | |
| material I am supposed to study. | | | | | | |
| 30. I have had difficulty adjusting to the style of | | | | | | |
| teaching at university. | | | | | | |

Key:

SD Strongly Agree

D Disagree

MD Mildly Disagree

MA Mildly Agree

A Agree

SA Strongly Agree

Section 3 - Your relationships with students and staff

How would you rate your relationships with those outlined below? Circle the number that bests represents your response.

Unsupportive Supportive

| | | | | | → | |
|-----------------------|---|---|---|---|----------|---|
| 31. Other students | 1 | 2 | 3 | 4 | 5 | 6 |
| 32. Lecturers | 1 | 2 | 3 | 4 | 5 | 6 |
| 33. Tutors | 1 | 2 | 3 | 4 | 5 | 6 |
| 34. Learning Advisors | 1 | 2 | 3 | 4 | 5 | 6 |

Invitation

The purpose of this project is to understand in greater depth the experience of first year students. The second stage will be a personal interview. If you are willing to take part in an interview please put your email address in the space provided below. You can take part in the interview in person, by email or by telephone.

| Your email address | | |
|--------------------|--|--|
|--------------------|--|--|

Appendix B - Exploring First Year Student Learning Experience

| 1 | What are your motives for studying at university? | |
|---------|-----------------------------------------------------------------------------------------------------|--|
| 2 | What do you think your family thinks about you attending university | |
| 3 | How have these views shaped your own view? | |
| 4 | What sort of work do you believe you would be good at? | |
| 5 6 | Where do you see yourself in five years' time? How confident are you of being able to get there? | |
| 7 | Are you open to alternative viewpoints? | |
| 8 | Are you experiencing any problems with your university studies? | |
| 9 | Could you tell me what the problems are? | |
| 10 | Are Are you aware of other students experiencing the same | |
| | problems you are experiencing? | |
| 11 | Do you have a plan of action for solving these problems? | |
| 12 | Do you have the skills to implement a solution to your problems? | |
| | | |
| | | |
| | | |
| Signatu | re of interviewer: Date: | |
| Signatu | re of interviewee: Date: | |

Appendix C - Mappings of Survey and Interview Questions to Phases of Transformational Learning

Survey Questions

| Table C1 | | |
|-----------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------|
| Mappings of Survey Que | estions to Phases of Tr | ransformational Learning |
| Section 2 - Survey | FYEQ Category | Transformational Learning |
| Question | | Phase |
| 19. The lecturers often | Academic Orientation | Phase 7. Acquisition of knowledge and skills for |
| stimulate my interest in the subjects | | implementing ones plans |
| 20. I enjoy the intellectual challenge of subjects I am studying | Academic Orientation | Phase 9. Building of confidence and competence in new roles and relationships |
| 21. I get a lot of satisfaction from studying | Academic Orientation | Phase 8. Provision trying of new roles |
| 22. I really like being a university student | Student Identity | Phase 5. Exploration of options for new roles, relationships and actions |
| 23. University has not lived up to my expectations | Student Identity | Phase 1. A disorienting dilemma |
| 24. I find it difficult to get myself motivated to study | Academic Application | Phase 2. Self-examination with feeling of guilt or shame |
| 25. I regularly seek the advice and assistance of the teaching staff | Academic Application | Phase 5. Exploration of options for new roles, relationships and actions |
| 26. I find it really hard to keep up with the volume of work in this course | Comprehending and Coping | Phase 1. A disorienting dilemma |
| 27. I feel overwhelmed by | Comprehending and | Phase 2. Self-examination with |
| all I have to do | Coping | feeling of guilt or shame |
| 28. My course workload is | Comprehending and | Phase 3. A critical assessment of |
| too heavy | Coping | epistemic, socio-cultural or psychological assumptions |
| 29. I find it difficult to | Comprehending and | Phase 1. A disorienting dilemma |
| comprehend a lot of the material I am supposed to study | Coping | |
| 30. I have had difficulty adjusting to the style of teaching at university | Comprehending and Coping | Phase 3. A critical assessment of epistemic, socio-cultural or psychological assumptions |

Interview Questions

| Table C2 | |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Mappings of Interview Questions to Phase | s of Transformational Learning |
| Interview Questions | Phase of Transformational Learning |
| 1. What are your motives for studying at university? | 5. Exploration of options for new roles, relationships and actions |
| 2. What do you think your family thinks about you attending university? | 3. A critical assessment of psychological, socio-cultural or epistemic assumptions |
| 3. How have their views shaped your own? | 3. A critical assessment of psychological, socio-cultural or epistemic assumptions |
| 4. What sort of work do you believe you would be good at? | 3. A critical assessment of psychological, socio-cultural or epistemic assumptions |
| 5. Where do you see yourself in five years' time? | 6. Planning a course of action |
| 6. How confident are you of being able to get there? | 3. A critical assessment of psychological, socio-cultural or epistemic assumptions |
| 7. Are you open to alternative viewpoints? | 5. Exploration of options for new roles, relationships and actions |
| 8. Are you experiencing any problems with university study? | 1. A disorienting dilemma |
| 9. Could you tell me what the problems are? | 1. A disorienting dilemma |
| 10. Are you aware of other students experiencing the same problems you are experiencing? | 4. Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change |
| 11. Do you have a plan of action for solving these problems? | 6. Planning a course of action |
| 12. Do you have the skills to implement a solution to your problems | 6. Planning a course of action |

Appendix D – Line-by-line Coding Applied to Interview Responses

Table D1 Q1 What are Your Motives for Attending University?

| First Level Codes | Processes Operating | Core Response's |
|---------------------|-------------------------------|----------------------|
| Degree | Want to be a Teacher. | Obtain Future Career |
| Teacher | Workforce Preparation. | |
| Good Job | Opportunity. | |
| Career | Passion. | |
| | | |
| Family | Inspiration. | Family Values |
| | Value placed in education. | |
| | | |
| To educate | Dissatisfaction with present. | Personal Values |
| Make a contribution | Dissatisfaction with past. | |
| | Be a Role Model. | |

Table D2

Q2. What do you Think Your Family Thinks About you Attending University?

| First Level Codes | Processes operating | Core Responses |
|-------------------|-----------------------------|--------------------------|
| Proud | High Value placed on | Approving and supportive |
| | Education. They like the | |
| Encourage | idea. | |
| | | |
| Like | Family Members are | |
| C | Teachers. | |
| Supportive | | |
| Very Pleased | Supporting Personal Choice. | |
| very r reased | | |
| Inspired | Expectation to attend | |
| msp.100 | University | |
| Нарру | Believe I will do well. | |
| | | |
| | Meeting expectations of the | |
| | family. | |
| | | |
| Reserved | Bemusement. | Approving and concerned |
| | | |
| Uncertain | Giving up Job to Attend | |
| Concerned | University. | |
| Concerned | Previous non completion of | |
| | course. | |

| Table D3 | | |
|--------------------|----------------------------------------|-------------------------|
| Q3. How have | These Views Influenced Your Own? | |
| First Level | Processes operating | Core Responses |
| Codes | | |
| Reinforce own | Need to achieve long term goal. | Supported my own view. |
| view | In an advantage of the Colores | |
| Supported | Investment in the future. | |
| Supported | Personal happiness more important than | |
| Positive | expectations. | |
| influence | 1 | |
| | Helped shape my own view. | |
| | | |
| CI. | Supportive family who are teachers. | |
| Change in attitude | | |
| attitude | | |
| | | |
| Raised | Need to study like everyone else. | Caused reflection on my |
| awareness | | own view. |
| G | Undertake New Role. | |
| Some extent | Listaned to their suggestion | |
| Large extent | Listened to their suggestion. | |
| Large extent | Motivated to prove them wrong. | |
| Caused self | server see the see server see see Se | |
| doubt | | |
| | | |
| Caused anxiety | | |
| Change in | | |
| attitude | | |
| Not really | I wouldn't listen to them | No influence. |

| Table D4 | 1 11 11 | 1 (2 |
|-----------------------|-------------------------------------------------|-----------------------|
| First Level Codes | do you believe you would be Processes operating | Core Responses |
| Teaching | Passion for teaching | Teaching |
| | Belief in own character | |
| | To be a role model | |
| | Derive Enjoyment | |
| | Prior Experience | |
| Working with children | Organized and warm hearted | Working with Children |
| Work with people | Desire to make a contribution | |
| | | |

| Table D5 | anangalfin finanagas' tima? | , |
|-----------------------|------------------------------------------------------|-------------------------------|
| First Level Codes | e yourself in five years' time? Processes operating | Core Responses |
| Teaching | Successfully Graduating | Teaching |
| Counseling | | |
| Mentoring Studying | | Travelling /Studying /Working |
| Travelling | Successfully Graduating | , working |
| Full time job | | |

| Table D6 | | |
|-----------------------|---------------------------------------------------------|----------------|
| Q6. How confident are | e you of being able to get ther | re? |
| First Level Codes | Processes operating | Core Responses |
| Very confident | Self confidence | Very confident |
| Confident reserved | Belief in doing the right thing | |
| Pretty confident | Self confidence | |
| | Self determination | |
| | Coping with Workload | |
| | Benefit of life experience | |
| | Concerned about study and meeting financial commitments | |
| Not overly confident | Adjusting to requirements of University learning | Not confident |
| | Adjusting to workload | |
| | Concerned about information overload | |
| | Have poor planning and prioritizing skills | |
| | Stressed by workload | |

| Table D7 | | |
|---------------------------|---------------------------------------------------------------------------------|----------------|
| Q7. Are you open to alter | rnative viewpoints? | |
| First Level Codes | Processes Operating | Core Responses |
| Consider other views | Value the opinions of others | Yes |
| Yes | Has considered alternatives | |
| Most definitely | Value placed in considering different views | |
| Absolutely | | |
| Conditional Time limit | Consider options if needed Depending on parental support Considers alternatives | Conditional |
| | | |
| Not open | No alternatives | No |
| Don't want to | No alternatives | |
| Survival | Consider options if needed | |
| No option | | |

| Table D8 | | |
|----------------------|-------------------------------------------|----------------|
| Q8 Are you experienc | ing any problems with univer | rsity study? |
| First Level Codes | Processes Operating | Core Responses |
| Time management | Difficulty adjusting | Yes |
| Workload | Overwhelmed | |
| Stress | Financial constraints place limit on time | |
| Self Doubt | | |
| | Difficulty keeping up | |
| Financial | | |
| | Prioritizing study | |

Work/Life balance

Work/Life balance

normal

Information overload seen as

No

No

Not really

| Table D9 | | |
|------------------------------|------------------------------------|-------------------------|
| Q9. Can you tell me w | hat the problems are? | |
| First Level Codes | Processes | Core Responses |
| Workload | Volume of work | Dealing with volume of |
| | | work |
| | | M |
| T: | Time | Managing my time |
| Time management | Time management | |
| | | |
| | | Financial commitments |
| Money issues | Need to earn money | |
| | | |
| | | |
| A diagram a 4 a maior maite. | A direction of the Training of the | Adjusting to University |
| Adjusting to university life | Adjusting to University | |
| inc | | |
| Stress | | |

Table D10
Q.10. Are you aware of other students facing the same problems you are?

| First Level Codes | Processes Operating | Core Responses |
|-------------------|-------------------------------|------------------|
| Yes | Experiencing stress but | Yes |
| | value placed in being able to | |
| | share with others. | |
| Time management | Feeling overwhelmed is | |
| | leading to self-doubt. | |
| Stress | | Time Management, |
| | Feel overwhelmed. | |
| | | Stress, |
| | Feeling worried and under | |
| | pressure. | Workload |
| Workload | Were not aware of amount | |
| | of work involved. | |
| Don't Know | Unaware due to age gap | No |

| Table D11 | | |
|-------------------|----------------------------|-----------------|
| Q11 Do you have a | plan of action for solving | these problems? |

| <u> </u> | of action for solving these | prootems. |
|------------------------------|-----------------------------|----------------|
| First Level Codes. | Processes Operating | Core Responses |
| Focus on readings | Focus | Yes |
| | | |
| I guess | Little bit at a time | |
| | | |
| Partial payment of utilities | Reorganize financial | |
| bills | commitments | |
| | | |
| Pull my weight | Adjusting to study | |
| | requirements | |
| Settle in | • | |
| | Seek professional help for | |
| Concentrate on study | stress | |
| • | | |
| Yes | Self confidence | |
| | | |
| Improve goal setting | Seek professional help for | |
| | depression | |
| Improve time management | | |
| | Reduce paid hours | |
| Hoping for the best | • | |
| 1 0 | Save money | |
| Not Really | Maybe more studying | No |
| <u> </u> | , , , , | |

| Table D12 | | | | |
|--------------------------------|-------------|----------|---------|----------|
| O12. Do you have the skills to | implement a | solution | to vour | problem? |

| First Level Codes Processes Operating Core Responses Time management Personal commitment. Yes Planning Ability to use resources and seek help Improve my focus Have strategies to use. Yes |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Planning Ability to use resources and seek help Improve my focus Have strategies to use. Yes |
| seek help Improve my focus Have strategies to use. Yes |
| Have strategies to use. Yes |
| Yes |
| |
| Con alon and manage man |
| Can plan and manage my Need to relax time. |
| |
| Know own weaknesses Think so Maturity brings adaptability. Think so |
| Timetabling and planning. |
| Personal determination. |
| |
| No Stressed and demotivated by No study load. |
| Others are in the same |
| boat/Makes me feel better Anticipating change. |
| Don't know Dependent on results. |
| Not promising |