THE FACTORS THAT SHAPE THE
VALUING OF TEXTILE EDUCATION IN
SECONDARY SCHOOLS

By
Louise DuVernet
M Sc S, B Ed, Ass Dip of Arts (Fashion Production)

Thesis presented in fulfilment of the requirements for the degree of
Doctor of Philosophy, School of Fashion and Textiles
RMIT University
November 2007
ACKNOWLEDGEMENTS

It gives me great pleasure to reflect on my journey toward the completion of a PhD in textiles education. The venture challenged by belief in self and reassured my belief in God. I will always be grateful to those who strengthened my commitment by reassuring me of my ability to get there. Noelene Kelly provided wonderful professional support and career counselling that set me on the journey; Mac Ferguson introduced me to the RMIT Textiles and Fashion School and was a great support with his wife Irene throughout the process; Dr Rajiv Padhye for offering me a position in the Postgraduate program at RMIT and being by supervisor; Veronica Pasfield provided counselling at difficult times when I didn’t know if I could manage work, study and family; King and Amy O’Malley Trust for the provision of a scholarship to manage the cost of the project; Lorraine Cunningham, Ruby Riach and Margaret Jacobsen, who are all outstanding home economists, for their support toward obtaining the scholarship; the talented and creative textiles teachers, students and student teachers who participated in the project and the Australian Catholic University for the provision of valuable study leave. Dr Pat Bazeley of The Research Farm in Bowral provided timely training and insights into the use of analysis software. Her provision of a retreat for PhD students at The Research Farm provides a supportive atmosphere and an opportunity for renewal in the writing phase of the thesis. I would like to acknowledge the contribution of Dr John Murray, retired English Professor from the Australian Catholic University, who played a vital role in assisting with the structure of the thesis and the final editing; and Dr David Forrest, as my second supervisor, who provided constructive advice throughout the entire process including submission after examination.

I would like to thank my husband Richard Hendriks for checking all my references, for regularly cooking the evening meal, contributing to the upkeep of the house and for his understanding during my mood swings. Finally I want to thank my darling son Alex for his never failing love despite the limited time I had to spend with him in formative years. I look forward to supporting him in the development of his career through to independence and the nurturing of his own family.
# TABLE OF CONTENTS

LIST OF FIGURES ........................................................................................................ iii
LIST OF TABLES ........................................................................................................... viii
GLOSSARY .................................................................................................................. ix
ABSTRACT .................................................................................................................. x

## CHAPTER 1
INTRODUCTION
1.1. Introduction to the study ............................................................................... 1
1.2. Research problem and questions .................................................................. 4
1.3. Justification for the research ......................................................................... 10
1.4. Methodology .................................................................................................. 12
1.5 Terminology ..................................................................................................... 13
1.6 Delimitation of scope and key assumptions ................................................ 14
    1.6.1 Personal rationale for the study ............................................................... 15
    1.6.2 The contemporary context of the study .................................................... 17
1.7 Outline of the thesis ........................................................................................ 18
1.8 Conclusion ........................................................................................................ 19

## CHAPTER 2
HISTORICAL CHANGES IN THE PERCEPTION OF THE VALUING OF TEXTILES EDUCATION THROUGH THE LENS OF THE THEORY OF REVITALIZATION
2.1 Introduction and chapter structure ................................................................. 20
2.2 The theory of revitalization ............................................................................. 20
    2.2.1 Stage 1: The steady state ........................................................................ 23
    2.2.2 Stage 2: The period of increased individual stress ................................. 28
    2.2.3 Stage 3: The state of cultural distortion .................................................. 33
    2.2.4 Stage 4: The Period of revitalization ....................................................... 41
        o Sub-stage I: Mazeway (worldview) reformulation ................................. 42
        o Substage II: Communication ................................................................. 47
        o Substage III: Organisation ..................................................................... 48
        o Sub-stage IV: Adaptation ..................................................................... 53
        o Sub-stage V: Cultural transformation ................................................... 54
        o Sub-stage VI: Routinization ................................................................. 66
        o Sub-stage VII: New steady state ............................................................ 77
2.3 Chapter summary and conclusion ................................................................. 83
CHAPTER 3
METHODOLOGY
3.1 Introduction ..................................................................................... 85
3.2 The research design ......................................................................... 86
  3.2.1 Justification of the methodology ............................................... 89
3.3 Ethical considerations ..................................................................... 97
3.4 Units of analysis ............................................................................. 99
  3.4.1 Description of background information ..................................... 100
  3.4.5 General description of respondents ......................................... 101
3.5 Phase one ....................................................................................... 101
  3.5.1 Purpose of phase one ................................................................. 101
  3.5.2 Instruments used to collect data ................................................ 102
  3.5.3 Explanation of data analysis ..................................................... 106
  3.5.4 Summary ................................................................................... 110
3.6 Phase two ....................................................................................... 110
  3.6.1 Purpose of phase two ................................................................. 110
  3.6.2 Instruments used to collect data ................................................ 110
  3.6.3 Explanation of data analysis ..................................................... 113
  3.6.4 Summary ................................................................................... 112
3.7 Phase three ..................................................................................... 113
  3.7.1 Purpose of phase three .............................................................. 113
  3.7.2 Instruments used to collect data ................................................ 114
  3.7.3 Explanation of data analysis ..................................................... 114
  3.7.4 Summary ................................................................................... 114
3.8 Limitations of the study ................................................................... 116
3.9 Chapter summary and conclusion ................................................. 116

CHAPTER 4
SELECTED FINDINGS
4.1 Introduction ..................................................................................... 117
4.2 Response rates ................................................................................ 117
4.3 Key Findings .................................................................................. 119
  4.3.1 Head teachers of technology ................................................... 119
  4.3.2 Secondary textiles students ....................................................... 124
  4.3.3 Textiles student teachers ......................................................... 132
APPENDICES

Appendix A - Timelines in access negotiations and data collection…………….274

Appendix B – Contents of survey kit Phase 1

B1 – Head teacher survey…………………………………………………………………………276
B2 – Textile teacher survey………………………………………………………………………278
B3 – Student teacher survey……………………………………………………………………280
B4 – Teacher consent letter……………………………………………………………………282
B5 – Student carer consent letter………………………………………………………………283
B6 – Principal consent letter……………………………………………………………………284

Appendix C – Phase 2 instruments

C1 – Textile Teacher extended response survey………………………………………………285
C2 – Textile Teacher semi-structured interview questions……………………………..286

Appendix D – Phase 3 instrument

D1 - Student teacher survey ……………………………………………………………………….287
D2 – Graduate teacher survey…………………………………………………………………..288

Appendix E – Codes of qualifications and other work indicated on head teacher and textile teacher surveys……………………………………………………………………..289

Appendix F – Teacher interview data …………………………………………………………290

Appendix G – NSW Model of Pedagogy ……………………………………………………..315
LIST OF FIGURES

Figure 1  Research areas for the study .......................................................... 9
Figure 2  Fully integrated Mixed Model Design ........................................ 96
Figure 3  Variation of Mixed Model Design ................................................. 96
Figure 4  Conceptual framework of factors influencing the VOTE ............. 102
Figure 5  Revised conceptual framework of factors influencing the VOTE .... 162
Figure 6  HSC Textiles and Design enrolments from 1970 – 2006 .......... 223
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Phase 1 data collection</td>
<td>87</td>
</tr>
<tr>
<td>Table 2</td>
<td>Phase 2 data collection – teacher extended response</td>
<td>88</td>
</tr>
<tr>
<td>Table 3</td>
<td>Phase 2 data collection – student teacher surveys</td>
<td>88</td>
</tr>
<tr>
<td>Table 4</td>
<td>The influence of the Dunkin and Biddle Model on survey design</td>
<td>104</td>
</tr>
<tr>
<td>Table 5</td>
<td>The dimensions and elements of the NSW Model of Pedagogy</td>
<td>118</td>
</tr>
<tr>
<td>Table 6</td>
<td>Quantitative data of head teachers</td>
<td>120</td>
</tr>
<tr>
<td>Table 7</td>
<td>Regional distribution of textile student respondents</td>
<td>124</td>
</tr>
<tr>
<td>Table 8</td>
<td>Perception of skill development attributed by textiles education</td>
<td>126</td>
</tr>
<tr>
<td>Table 9</td>
<td>Regional distribution of students wanting to be teachers</td>
<td>131</td>
</tr>
<tr>
<td>Table 10</td>
<td>Perceptions of the variety and quality of textiles in regions</td>
<td>132</td>
</tr>
<tr>
<td>Table 11</td>
<td>Teacher / students opinion of an ideal 7-10 textiles teacher</td>
<td>136</td>
</tr>
<tr>
<td>Table 12</td>
<td>Teacher / student teacher opinion of effective HSC teacher</td>
<td>140</td>
</tr>
<tr>
<td>Table 13</td>
<td>Teacher / student teacher opinion on importance of skills</td>
<td>141</td>
</tr>
<tr>
<td>Table 14</td>
<td>Textiles in Technology Departments reported by student teachers</td>
<td>143</td>
</tr>
<tr>
<td>Table 15</td>
<td>Quantitative data of textiles teachers</td>
<td>143</td>
</tr>
<tr>
<td>Table 16</td>
<td>Summary of the emphasis placed on factors valuing textiles education</td>
<td>148</td>
</tr>
<tr>
<td>Table 17</td>
<td>Enrolments in technology teacher programs 2002-2006</td>
<td>155</td>
</tr>
<tr>
<td>Table 18</td>
<td>Themes and activities for Creativity through mind and body</td>
<td>263</td>
</tr>
</tbody>
</table>
GLOSSARY

ABS Australian Bureau of Statistics
ACTU Australian Council for Trade Unions
ACER Australian Council for Educational Research
AEC Australian Education Council
ASPA Australian Secondary Principals’ Association
ATTP Accelerated Teacher Training Programs
DATTA Design and Technology Training Agents
DECA Design Education Council of Australia
DET Department of Education, and Training
DEST Department of Education, Science and Training
FACS Family and Consumer Sciences
HEAA Home Economics Association of Australia
HEIA Home Economics Institute of Australia
HSC Higher School Certificate
ITEA International Technology Education Association
KLA Key Learning Area
MCEETYA Ministerial Council for Education, Employment, Training and Youth Affairs
NSW New South Wales
OFSTED Office for Standards in Education
PDHPE Personal Development Health and Physical Education
SCAA School Curriculum and Assessment Authority
TAFE Technical and Further Education
TAS Technological and Applied Studies
TCF Textile Clothing and Footwear industries
TEA Textiles Educators’ Association renamed Technology Educators’ Association, May 1993.
TEFA Technology Education Federation of Australia.
UNESCO United Nations Educational, Scientific and Cultural Organisation
UK United Kingdom
USA United States of America
VET Vocational Education and Training
ABSTRACT

Views on the valuing and revitalization of textiles education in secondary schools in New South Wales (NSW) vary widely. NSW is unique in that it is the only state in Australia to have a discrete textiles related subject offered for their senior secondary qualifications. The introduction of a new syllabus for the upper secondary schools in 1999 saw the Higher School Certificate (HSC) subject of Textiles and Design become the fastest growing HSC subject from 2000 - 2004. The fact that the subject survived the review of the New HSC was a testimony to the support it received from all sectors of textiles education from secondary to tertiary level and from the professional associations representing the textiles industry. The main concern expressed by the teachers in the secondary schools was the ageing of the current teaching population and the inadequacy of the training institutions to train teachers in sufficient quantity and quality to replace those who are anticipated to retire over the next five years.

The study aimed to identify the perceived value of textiles education as a means of supporting the promotion of the subject and to uncover any negative perceptions of the subject and its future so strategies could be developed to overcome any barriers to the revival and maintenance of the subject beyond 2010. Of particular interest was the value of textiles education in bridging a cultural divide between migrant students and the schools and its importance to students of all abilities for its development and expression of creativity. The negative aspects of the cost of resources and perception of low status as an academic subject in schools are addressed.

The significance of the study is based in the inclusive nature of the participants represented in the study that include head teachers, secondary textiles teachers, student teachers and secondary textiles students. The diversity of perspectives gave richness to the data and provides some wonderful insights into the dynamic relationships that affect the effective presentation of textiles curriculum in secondary schools. Using models to analyse the historical influences on current perceptions of textiles, the study found evidence of the resilience and drive of new young teachers who are often not given the encouragement to develop their skills in preparation to support the future of textiles education in NSW.
CHAPTER 1
INTRODUCTION

1.1 Introduction to the study

This research developed out of the author’s belief in the value of textile education in providing an opportunity to quieten and focus the mind on the God-given power of the creative self to heal and change one’s personal situation. I respectfully acknowledge that Indigenous Australians had their own history of textiles and it formed a vital part of their food collection, dress and ceremonial expressions. As a woman of no specific Indigenous background, that I am aware of, I am only including the history of the European influence on textiles education in Australia. I could not hope to include the history of Indigenous textiles education and be able to honour its history or do it justice.

By textiles education I refer to all fibre based creative activities that involve the creation of objects from textile materials including apparel and fashion design, costume, home furnishings, textile art and personal gifts - described by some as fabric craft (Stalker, 2005). The secondary textiles technology curriculum in New South Wales (NSW) covers the five focus areas – apparel, furnishing, costume, textile art and non-apparel. The technology curriculum utilises textiles as a material along with wood, metal, plastics and food. This study only focuses on the perception of the value of textiles education by teachers and students experiencing the study of textiles through the elective subject of Textiles and Design in the senior school.

The researcher’s perceptions of the value of textiles education include: 1) the benefit of the study of textiles to the students in skill development providing a base for further vocational studies, 2) preparation for life long learning in recreation and maintenance of textile articles, 3) the development of self esteem and opportunities for relaxation and 4) the benefit of offering the study of textiles within the school to support extra curricula activities such as musical performances and displays.

In a time of increased discussion about the importance of developing spiritual wellbeing (Gardner, 1990; School Curriculum and Assessment Authority, 1996; Dyer, 1992; Board of Studies, 1999; Hall, 2004; Crawford and Rossiter, 2006) it is important for the value of textiles to be recognised and more effectively utilised in the schools for spiritual development. As there is no definition of spirituality given by
the Board of Studies in NSW, for the purpose of this study the term ‘spiritual’ is as defined in the School Curriculum and Assessment Authority (SCAA, 1996), United Kingdom (UK), discussion paper on Spiritual and Moral Development. The paper defines the term spiritual as applying to something fundamental in the human condition which is not necessarily experienced through the physical senses and/or expressed through everyday language… It has to do with the universal search for individual identity – with our responses to challenging experiences, such as death, suffering, beauty and encounters with good and evil. It is to do with the search for meaning and purpose in life and for values by which to live (p. 3).

McGregor and Chesworth (2005) raised a question of the opportunities to develop the spiritual being in home economics, stating that “Spirituality in education (including home economics) is important because the current spiritual poverty in schools provides very few opportunities for students to quench their thirst for meaning and wholeness” (p. 41). They proposed that home economics teachers should be rethinking their conventional approach by embracing a “critical, reflective, participatory, dialectic approach so that those affected by their practice are involved in the generation of their own knowledge and spiritual wellbeing” (p. 41).

Pavlova (2005) identified the rapid social changes as a challenge for educators. She reflected on positions taken by other technology educators relevant to social change and called for technology education to “constantly re-examine its rationale in order to formulate responses to changing contexts to improve the quality of learning for students” (p. 199). Although Pavlova did not mention the spiritual dimension of education she concluded that “Technology education can provide a rich environment for understanding technology in society and the development of students’ identities and responsibilities” (p. 213). Her argument was clearly to encourage technology educators to teach students to reflect on how society is changing and challenge the decisions made, so they do not passively adapt to the demands of the changing society. In her comments that “self-representation, consumerism and experience is not enough for a meaningful life” (p. 210), there is a suggestion of the consideration of the whole person, spiritual dimension and self direction, beyond what technology education has been thought to include.
The study of the value of textiles found evidence of textiles education contributing to the development of the self-esteem of students and comfort in their cultural identities in comments made by teachers and students that will be described further in Chapters 5 and 6. Textile studies’ link to history, culture and creativity position it well for the role of developing spiritual awareness and self confidence. Textiles and design teachers need to claim their rightful role in building school morale and making sure future Australians, have the skills to apply to their daily lives for relaxation and contemplation, social situations, and to use in employment or as informed consumers.

The value of textiles craft is not in doubt among occupational therapists and nursing practitioners in the management of stress and preservation of identity through the recovery from serious illness (Predeger, 1996; Reynolds, 2003; Schmid, 2005) but the attitude of teachers and educational systems to its future in secondary schools may just bring about its demise if they can not make its obvious benefits known to a wider audience. More recently Stalker (2005) stated that she was “intrigued by the invisibility of these areas [fabric craft and fashion] as worthy of research and as a suitable base from which to foster women’s learning and authority” (p. 12). Stalker claimed that the study of fabric crafts was “demeaned because they locate women as the prime knowers and experts… and areas where women can have an authoritative voice, experience the power of having extensive, legitimate and valuable knowledge” (p. 168). This study, however, aims to inform the home economics community, technology educators and the wider secondary education community of the value of the study of textiles in addressing the need for emotional and spiritual wellbeing. The study of textiles, as the more creative side of home economics and one of the creative expressions possible through technology education, provides valuable opportunities for spiritual development. Stalker (2005) also stated that “It perplexes me that they [fabric craft and fashion] have not been used more often among facilitators as a starting point to engage learners” (p. 168). The study of textiles has provided students with an alternative link with technology. The subject is no longer lost in the past, it is relevant to every aspect of life and connects us with the past and to the future.

The study of textiles in secondary school has been associated with home economics in NSW since the 1970s and many of the teachers still teaching the subject in NSW had
their first training experience in a home economics teaching diploma which later became a Bachelor of Education in Home Economics. The aim of home economics to promote wellbeing of families and individuals, remains valuable in the philosophical framework of this study. This wellbeing derives from physical and intellectual development realised through effective management and lifestyle choices made with strong family values. Hall (2004) claims that “creativity, imagination, making and appreciation are spiritual in nature and contain elements of spirituality” (p. 144). Hall also argued that the experiences of making and responding to art are essential to our spiritual wellbeing, and that learning, as a creative process, is also spiritual in nature. Significantly, the only reference to creativity in the Home Economics syllabuses in other states in Australia is in the textiles sections of the syllabus. Textiles education in NSW is now firmly placed in the Technology Learning Area with a stronger focus on commercially viable production and yet in the context of human need, self expression and development of identity through textile based activities, need to be supported for their possible future assistance with the management of stress and depression in society.

1.2 Research Problem and Research Questions
Textiles education in NSW has fluctuated in its popularity and appears to be on a wave of revitalisation. This perception was validated by the data collected from the textile teachers and the Head of Department surveys. The revitalisation of textiles education in secondary schools in NSW has implications for the future of the subject. The concern that the revitalisation movement raises is one of the availability of teachers to support the revitalisation and how the knowledge of the value of textiles education in the adult population can be found to be valuable in the promotion of textiles education in secondary schools.

For the purpose of this study the concept of revitalization movement follows the Wallace (1956) model defined as a “deliberate, organised, conscious effort my members of a society to construct a more satisfying culture” (p. 265). The study assumes the members of the society being analysed are those who are active participants in textiles education in NSW secondary schools and the culture to be considered is the school culture.
Sewing and needlework was an integral part of education for girls until a chain of events commencing with the feminist movement in the 1960s and 1970s, followed by the push for gender equality in the early 1980s and the provision of opportunities for women’s non traditional technical training in the late 1980s. Textiles education in secondary schools in NSW became part of the technology curriculum area in 1992. It was no longer compulsory for girls, but was made available for boys in co-education secondary schools. The numbers enrolling in textiles studies decreased and NSW was the only state to retain a discrete subject for the study of textiles through to Stage 6. The study of apparel, interior design and accessories is included in the mandatory technology Stage 4 syllabus as a possible study for all students. It is also offered as an elective in Stages 5 and 6. In 2005 only 273 secondary schools out of a possible 1008 schools in NSW offered textiles at Stage 6 level. This figure would appear to indicate a small level of interest, but actually represents a 250% increase on the 109 schools offering the subjects in 1999, only six years earlier. This is a clear indicator of the revival of textiles education since 1999 and the need for textiles teachers.

The problem of the future of textiles education in secondary schools is two-fold. Its first expression is in the inconsistency of attitude within the fragmented textiles teaching community. Some recognise that the subject is in revival and are experiencing the increased interest in the subject in the schools. These teachers know the true value of textiles education and promote its benefits in the schools. Others have said there is no interest in textiles education in the schools and they can not get the numbers to offer the elective courses in Textiles Technology Stage 4 let alone the post compulsory Textiles and Design in Stage 6. Evidence of this discussion appears in Chapter 5. The second aspect of the problem is the need to ensure that the ageing population of experienced textile teachers are replaced by well-trained quality teachers who have a belief in the benefits of offering textiles education in secondary schools to improve school morale, to develop respect for and communication across different cultures, and in so doing, to assist in the development of confident young people with a strong positive self-image. Evidence of this value of textiles will also be found in Chapter 5.

I am arguing that the study of textiles is a vital part of secondary education and even though it was in decline in the 10 years prior to 1999, it is now experiencing a
‘revitalization movement’ (Wallace, 1956). In order for the revitalization of textiles education to be successful in returning to a steady state of valued existence, the useful knowledge needed is the awareness of the cultural barriers to, and enablers of, that steady state. According to Wallace (1956) revitalization is a special kind of culture change phenomenon:

the persons involved in the process of revitalization must perceive their culture as a system; they must feel that this cultural system is unsatisfactory; and they must innovate not merely discrete items, but a new cultural system, specifying new relationships as well as new traits (p. 265).

In guiding the literature review regarding the background to the problem (Chapter 2), the stages of the Revitalization Movement theory (Wallace, 1956) were used to identify the events that contributed to the early valuing of textiles education as an essential pastime for girls, through the decline of textiles education and then its revival, referred to in popular press as a “Zen new pastime” (Baker, 2006, p. 8). The author was made aware of the role of charismatic leaders in ‘revitalization movements’ and the danger of not continuing through to ‘routinization’ to establish the new steady state (Wallace, 1956). In addition, other support arguments for the value of textiles education were gleaned from literature from five main discipline areas

1) Home Economics
2) Technology
3) Visual Arts
4) Occupational therapy and nursing practice
5) Spirituality in education.

In the 1950s and 1960s textiles education was taught in primary schools as a compulsory part of girls’ education by teachers with extensive technical training. In secondary schools it was also taught by teachers with technical training, many aligned with the Home Economics Department (Peacock, 1982). Even though textiles education is now taught in the learning area of technology it continues to appreciate the sentiment and philosophy of the home economics model, particularly in the area of management and concern for human wellbeing.
Technology gave a stronger design focus to the study of textiles products especially as items that could be mass produced for a commercial opportunity. There was consequently less focus on the quality of workmanship and more on innovative processes and problem solving (Morley, 2002). There was a concern that the materials used in the articles produced met with the requirements of end use. The interest in innovation deriving from technology is contributing most to our current creative textiles education program (DuVernet, 2002b).

Visual Arts is included in the study for their thinking on creativity (Feldman, Csikszentmihalyi & Gardner, 1994) and linking to spirituality (Hall, 2004). Visual art has also developed a higher status in the schools. It has demonstrated its contribution to higher order thinking and although this has always been a contribution of textiles through analysis of the element of design, contributions of culture and the science of fibre properties, it has not been in the nature of textiles teachers, or indeed the culture of textiles educators in the past, to promote this aspect of the course and have its intellectual value recognised.

Occupational therapy and nursing practice are grouped together in the study as an area beyond teaching that has indicated the value of textiles for recovery from illness, the maintenance of self image and stress management (Schmid, 2005). With increased instances of depression and stress in society, the contribution of textiles craft can be seen as making a valuable contribution in this area.

Finally spirituality was incorporated in the study as it was mentioned in the aim for the New Higher School Certificate (1999). It is a growing theme in educational literature (Hall, 2004) and an area identified by authors (McGregor & Chesworth, 2005) in the home economics area as an important consideration for home economics in the future. Most recently Petrina (2006) questioned how spirituality could be addressed in design and technology in developing existential values.

Wallace (1956) spoke of revitalization as an organismic analogy (p. 266). This analogy refers to an organism being composed of many parts that are integral to its effective functioning. It refers to all systems human and non-human. So it is with textiles education that all the areas listed above make a valuable contribution to the
knowledge development and contribute to the experience of teachers and students. This includes resources available. The organismic analogy for this study developed from the overlapping of the areas that informed the study. In the management and administration of the development of teachers for textiles education there is also the valuable input of industry, Technical and Further Education (TAFE), universities, professional associations and Government organisation such as The Board of Studies (BOS) and the Department of Education and Training (DET). The complexity of the organism is affected by political, economic and social agendas that are beyond this study and yet the impact is evident in the historical study of the subject area.

The research questions that the thesis will answer are

1) **What useful knowledge affecting the perceived value of textiles education will best support the development of effective textiles education in secondary schools in New South Wales beyond 2010?**

This question will be developed in Chapter 2 through historical literature regarding needlework for girls prior to Home Economics, in Home Economics and into Technology guided by Anthony Wallace’s (1956) theory of 'Revitalisation Movements'; textiles craft in occupational therapy and nursing practice; visual art and creativity; and spiritual development.

2) **Are there textiles teachers of sufficient quantity and quality being trained for and retained in secondary schools in NSW to ensure the continuance of the stages of textile education’s 'revitalisation movement' beyond 2010?**

This question arose from the discussion of the universal shortage of teachers recognised by Cole (1998) in research for the Australian Council of Deans of Education. The Australian Bureau of Statistics (2003) noted the increase in the percentage of teachers over 45 rose from 17 percent in 2001 to 44 percent in 2003. If this trend continues through to 2006 the projected proportion of teachers over 45 could now be over 70 percent of teachers. The issue of shortages of home economics teachers was reinforced by the work of Pendergast, Reynolds and Crane (2000) and later by Cornius-Randall (2004). This study addresses the supply of textiles teachers in secondary schools in NSW through school surveys and data on university enrolment in relevant teacher training courses. The results will be presented in
Chapter 4. Conclusions to the research findings regarding the question of the quantity and quality of teachers are outlined in Chapter 5.

Figure 1 presents the overlapping areas that are relevant to the future study of textiles in NSW.

Figure 1 Research areas for the study

In answering the research questions head teachers of technology, textiles teachers, senior secondary textile students and technology student teachers in NSW were surveyed regarding their textiles experiences and perceptions of the value of textiles in secondary schools. This data also identified the characteristics of teachers that most appeal to the students studying textiles and the knowledge and skills that were valued by all the respondents. The students like to see a teacher who is fashionable, fun and
interested in the students. Knowledge of practical solutions to construction problems was the most highly valued attribute of teachers and needs to be better addressed in teacher training. These findings will be expanded on in Chapter 4.

Teacher interviews were used to enrich the data to extend themes identified in the survey data on factors that shape the valuing of textiles education in secondary schools. These included the teacher as a self-promoter, their involvement in school activities that promote the subject, and relationship building within the technology department and other departments in the school. The outcomes of this aspect of the research will be further discussed in Chapter 5.

After identifying the characteristic of teachers and schools that best promote the value of textiles in secondary schools, it is important to ensure that the quality and quantity of teachers can be sustained through effective teacher training practices. Enrolment data from the Department of Education Science and Training (DEST) regarding all enrolment figures for design and technology undergraduate and graduate programs were used to further inform the question of the quality and quantity of teachers available to teach post 2010. This research found that even though some programs have been cut, there are new programs that use the retraining of visual arts teachers and others that include textiles electives in the technology strand of visual arts/technology teaching degrees. There will be more detail of this training trend in Chapter 5.

1.3 Justification for the research
The importance of textiles education/textiles craft as a women’s pastime has long been valued in the ‘sewing community’ and formed an essential part of a girl’s education, whatever her social status, with historical evidence from the 15th Century to the 1990s. Historically, girls were taught needlework from a young age. Needlework was a compulsory part of girls’ primary education, with evidence of mastery of embroidery and sewing technique at ten years of age as discussed in Chapter 2. Textile craft is increasingly valued as a creative art form of occupational therapy for men and women and yet there are still anecdotal reports of its low status in secondary schools. The fact that the NSW Department of Education and Training has set up a retraining program to address the immediate need for textiles teachers in
government schools; Textiles and Design was retained in the senior secondary school curriculum after rigorous scrutiny through the NSW Board of Studies in preparation for the New Higher School Certificate; and the fact that the Department of Industry Tourism and Resources contributed $250,000 over two years for resource development for a quality secondary textiles teaching program under the National Framework for Excellence in Textiles Clothing and Footwear, supports the claim that textiles is an important subject in the school curriculum.

The value of textiles to adolescents is an area of relative neglect in the literature. More research has been dedicated to textile craft in overcoming emotional trauma, illness and the maintenance of self image as it pertains to the sick or elderly than has been conducted on its relation to secondary school students. Textiles teachers and head teachers of technology have seen the evidence of students transformed in textiles classes. This research formalises that knowledge.

Unlike other areas of teaching, such as visual art or music, in which there are strong united communities to support education, the area of textiles has been typified by its fragmentation, with splinter groups operating out of different ideologies. The range of focus areas in the study of textiles emphasises how diverse the study is and how it encompasses all aspects of everyday life. Apart from the industry diversity, teachers themselves have varied backgrounds that are sometimes in conflict with each other. Such is the current political climate among technology/home economics teachers in NSW.

Apart from the diversity of the industry, within that diversity of design focus are people with different interest in the design area – the manufacturers, designers and retailers. The manufacturers have a strong focus on price rationalisation and productivity. Designers want the manufacturers to provide the highest quality product for the least price and in small volumes (DuVernet, 2003). The textile artists share the creative philosophies of visual art, and the costume designers are more aligned with the arts, media and the cultural industries (Hart, 2001). Secondary textiles teachers somehow need to have an understanding of the philosophies of all these areas to inform their classroom practice. This matter has to be addressed in teacher training.
which this study informs. How the study informs teacher training will be seen in Chapter 8.

Previous researchers in the discipline of home economics have not used this mixed method approach to identify the value of textiles education in secondary schools. The methods employed in this study are effective in providing both quantitative and qualitative data on the questions presented for the thesis. The methodology is structured to produce both the breadth and richness of data required to address a complex problem.

The research findings have potential for future research. In the discipline of home economics the majority of doctoral theses have been focussed on nutrition, cultural textiles and home economics pedagogy. This study reveals the area of textiles education as an important one in home economics, particularly in its opportunity to develop spiritual intelligence and investigate the opportunities for life-changing experiences related to the management of stress and misfortune through the study of textiles or textiles craft.

1.4 Methodology

The literature review was guided by the stages of revival experienced in textiles and design as examined through the typology of revitalisation movements developed by Anthony Wallace (1956). The literature review identified a number of revitalisation movement attempts that have failed in the past and focuses on where they went wrong to ensure a more successful completion of revitalisation and maintenance beyond 2010. This aspect of the literature review will be found in Chapter 2.

Permission to conduct research was obtained from the Ethics Committees of RMIT University, Australian Catholic University, Whitehouse Institute, The NSW Department of Education and Training, NSW Board of Studies, Independent Schools and Catholic Education Offices of all the Diocese in NSW except Lismore, which declined the request. The data set of all schools offering HSC Textiles and Design in 2004 was obtained from the NSW Board of Studies. It contained enrolment data for Year 11 and Year 12 textiles students from 1999 to 2004. As the 2004 Year 11 enrolment represented the most recent numbers, these schools were targeted for the
short response survey. A letter was sent to all the Principals of the schools listed in the
data set inviting their participation in the study. Head Teachers, textile teachers and
students were surveyed with a mixed method approach using the Dunkin and Biddle
Model of Teaching (1974) that outlined the variables to be targeted.

The variables that were slightly modified included postcode, gender, age, textiles
experiences and respondents’ perception of the value of textiles. This quantitative data
was entered into data analysis software as attributes and formed the basis for
qualitative analysis on the perceived value of textiles to these different groups. By
comparing the groups responses using intersection matrices in N*Vivo analysis
software, dominant themes were identified and quantified. These quantified themes
are then checked against the NSW Model of Pedagogy (NSW Department of
Education and Training, 2003) to reinforce the argument that textiles education
classroom practices have links to improved student outcomes according to the Quality

In regard to the quantity of textiles teachers, teachers were asked their anticipated
years of remaining service. The positioning of secondary students who are
considering a career in textiles teaching is identified and enrolment data from the
Department of Education Science and Training (DEST) offers figures for Design and
Technology undergraduate and graduate programs. Both procedures will be used to
further inform the question of the quality and quantity of teachers available to teach
post 2010. The methodology will be further explained in chapter 3

1.5 Terminology
There are three terms used within this study that required explanation for the context
of this research.

“Value of textiles education” – This expression refers to three aspects of textiles
education. It refers to the intrinsic value as a means of personal expression and
development. Secondly, textiles education has utilitarian value as a means of gaining
skills and possibly assists toward employment. Thirdly, it is also relevant to consider
the value of textiles in terms of its status relative to other subjects.
“Experienced Teachers” – The term ‘experienced’ in this study was applied to the teachers who have taught Textiles and Design at Higher School Certificate level for over three years and have produced results in at least Band 5 in those three years.

“Textiles Teachers” – The title textiles teachers was adopted in contrast to teachers of textiles and design. Textiles teachers are multifarious in their background. In NSW secondary schools textiles as a subject is taught in Design and Technology 9-12, Technology Mandatory 7-8, Textiles Technology 7-10, Textiles and Design 11-12 and Visual Arts 11-12. The more usual path for the training of teachers for this subject matter has been as a textiles major in a Bachelor of Education (Home Economics) or more recently a Bachelor of Teaching/ Bachelor of Arts – Technology. The study found that the backgrounds of textiles teachers were so diverse that effective sampling was difficult.

1.6 Delimitations of scope and key assumptions

I respectfully acknowledge that Indigenous Australians had their own history of textiles and it formed a vital part of their food collection, dress and ceremonial expressions. As a woman of no specific Indigenous background, that I am aware of, I am only including the history of the European influence on textiles education in Australia. I could not hope to include the history of Indigenous textiles and be able to honour its history or do it justice.

It was not the intention to seek a response about the value of textiles education from teachers using textiles as the central material for the development of design and technology or visual arts in senior schools yet some of the respondents did have experience of its application in these forums.

It was not feasible to study the perspective of student teachers at universities other than Australian Catholic University, but observations were made from data obtained from the Australian Bureau of Statistics of the enrolment in Design and Technology programs in the other universities. The data on all trainee teachers studying technology as a teaching area is relevant to the research because, as is seen in the conclusions in Chapter 6, young teachers who have not had any textiles and design training can develop the skills in the schools if they are exposed to a supportive inspirational community of textile educators. The responses from head teachers in the schools were
limited to a sample with a strong bias toward females of home economics background although there was some representation of five male head teachers with industrial arts and visual arts background.

As the problem states, generalisation of the results to teaching textiles outside NSW schools, was not intended, though the findings may be relevant to consider when teaching textiles curriculum within home economics and technology courses in other states.

1.6.1 Personal Rationale for the study

The study is conducted on the foundation of my diverse experience in textiles from early contact in childhood through primary and secondary school to home economics teacher training, to managing my own apparel manufacturing business, teacher education, liaising with industry to upgrade secondary teachers’ knowledge of textiles with the development of teaching resources and conference coordination, and involvement in Higher School Certificate (HSC) syllabus development and examination. I have occupied and continue to occupy positions within structures of curriculum development and delivery. My career in textiles education spans three decades of being a student, student teacher, classroom teacher and tertiary educator.

As part of my work as a classroom teacher during the 1980s, I became involved in the promotion of textiles and design through state-based Education Week activities and HSC Textile and Design marking. I was an enthusiastic teacher who maintained contact with industry. It was not until a senior textiles student questioned my qualifications to teach textiles that I reconsidered my future. The student thought I was not in a position to talk about the textile industry if I had never worked in the industry. Therefore, after ten years of teaching in secondary schools I took leave to set up my own apparel manufacturing business. It did not take long to realise the gaps in my knowledge and preparedness for such an undertaking. It was necessary to enrol in Technology and Further Education (TAFE) in a Diploma of Arts in Apparel Manufacture to upgrade my knowledge and skills. I set up a business that I operated for six years.
In the meantime, the curriculum changes to the area made my new-found skills very attractive and I returned to teaching. It was suggested that I should be planning for a career in teacher education and enrolled in a Master of Scientific Studies at Newcastle University. In 1993 I was employed by Australian Catholic University (ACU) to develop the textiles and food technology areas of their Design and Technology teaching degree. This led to involvement in examination committees and, at the end of the 1990s, as a consultant to support the introduction of new curriculum in textiles and design. I was responsible for the review of contemporary national and international practice in relation to the Textiles and Design Syllabus knowledge and practice, before taking part in the work of the writing committee for the new syllabus.

The value of my liaison with industry was evident in the development of teaching resources for the new syllabus and the funding of a Quality Teacher Program by the Department of Industry Tourism Resources under the National Framework for Excellence (NFE) in Textile Clothing and Footwear (TCF) industries and training. As a result I became a participant in committees for the retraining of teachers for the Department of Education and Training (DET) and was invited to participate in conferences both in Australia and abroad.

I have been part of the production and interpretation of the formal textiles curriculum central to this study, its support documents and the training and retraining of teachers for textiles education. During the curriculum development process, I found my experience in industry and completion of TAFE qualifications valuable assets. Beyond my direct involvement in shaping the nature of textiles education in schools, I hold a particular philosophical position about textiles that is influenced by the luxury of not being subject to the everyday demands of the secondary classroom. My passion for the subject area is driven by inspirational textiles teachers in secondary schools who truly make a difference in their schools and the lives of their students. I would like to instil that passion in my students at ACU, and so the knowledge and practice of these classroom teachers help me to remain effective in my current employment as a lecturer in textiles technology to undergraduates training to become textile teachers. My involvement in professional associations, both for education and industry, attendance at Textiles Fibre Forums and textiles art workshops and visits to secondary
schools ensures that I am in a good position to see the far reaching potential for this valued subject area.

1.6.2 The contemporary context of the study
In popular press, Amanda Hooton (2000) blamed the feminist movement for labelling the development of domestic skills for women as detrimental to their status in society and so created a generation that have been neglected in realising the pleasure the study of textiles can bring to their lives. People who find the occupation of textile practice ‘life saving’ have been exposed to textiles experiences in their youth and have the skills as a resource to build on in the management of their illnesses in their older years. I had the opportunity to observe the recovery of a dear friend from a life threatening juncture with cancer with the assistance of a renewed interest in textiles. Many people can relate to similar situations where textiles craft has enriched lives.

Lane (2005b) warned of an epidemic of mental health problems and urges the adoption of new approaches to public health that embrace creativity within the fields of research. “It is necessary that partnerships be formed between all health, arts, and education departments to recognise creativity as not only rewarding and pleasurable, but also as biologically essential to our health and well-being” (p. 205).

Young people who have little, if any, exposure to textiles education in their youth will not have that resource to build on for their healing later in life, or the knowledge of skills to apply to that constructive hobby in the retirement years. Textiles craft in the community, and textiles education in schools is growing in popularity and this popularity needs to be harnessed to create opportunities for the future. Most of the research related to the impact of textile art on identity maintenance and health benefits has centred around the elderly and the chronically ill. The value of textiles education in secondary schools has only been observed through research associated with textiles craft in art education in United Kingdom and Japan (Hall, 2004).

The study of textiles has been marginalised by home economics professional bodies. In technology it receives greater support. Dealing with this situation was the motivation to set up separate professional bodies especially for textiles educators in Victoria and NSW. Doing so allowed for it to be dealt with separately to home economics and technology because textiles has a valuable role to play in both the field
of home economics and technology. Rather than accepting marginalisation, a way forward is to identify the role textiles has to play in home economics, technology and secondary education.

The emphasis in home economics literature on developing the academic rigour of the field to enhance its status marginalises textiles, in that textiles values practical skills and the development of the spiritual self through creativity and making. It is recognised that creative pursuits have their own intellectual demands. As Howard Gardner (1990) states,

> human artistry is viewed first and foremost as an activity of the mind, an activity that involves the use of and transformation of various kinds of symbols and systems of symbols...Just as one can not assume that individuals will – in the absence of support - learn to read and write in their natural languages, so to it seems reasonable to assume that individuals can benefit from assistance in learning to “read” and “write” in the various languages of the arts (p. 9).

The perception that the study of textiles would have lower academic status is flawed. As Donna Pendergast (2001b) stated “Home economics … need not be inevitably marginalised, unless there is no recognition of new possibilities which might seem to be outside ways of conceptualising thinking” (p. 8). It is also anticipated that the promotion of textiles with the value attributed by other disciplines will see textiles not only celebrated within the home economics discipline, but also recognised as making a valuable contribution to education.

Many have experienced the power of the ‘woman spirit’ (Solomon, 2006) in a circle of quilt makers or in the development of self-esteem in a boy who has completed his first textile item. Home economics needs to focus more on developing the whole person through the three H’s of heads, hearts and hands. By celebrating academic excellence as well as practical creative excellence we create a balance for the whole person. Both are necessary for the status of home economics.

1.7 Outline of the thesis
In order to seek answers to the questions above, the relevant literature was reviewed. Chapter two will cover the literature review of the five areas of interest to the study of
the value of textiles education relevant to the first research question guided by Wallace’s (1956) theory of Revitalisation Movements. These stages are reflected in the history of needlework in NSW, textiles in home economics, textiles in technology, lessons from visual art, models from occupational therapy and spirituality in education. In the later stages of revitalisation issues as they relate to question two and textiles teachers of sufficient quantity and quality are raised. The chapter will also inform the notion of retaining good teachers.

Chapter three examines in detail the methodology adopted, including the research design, the conceptual framework and procedures for analysis.

Chapter four presents the results of the data collection from the school survey and the survey of student teachers and reports on the teacher interview phase. The interviews enrich the survey data on the relationships that develop between teacher and students and their relationship with the school culture that impact on the perceived value of textiles.

Chapter five discusses the factors contributing to the valuing of textiles education and the cultural characteristics of schools and teachers that provide the most positive environment for the development of the study of textiles. This chapter addresses the first question of the study.

Chapter six provides an overview of the study’s conclusions with recommendations for the way forward with particular discussion of textile teacher training and suggests future research regarding questions raised by answering the second question of this thesis.

1.8 Conclusion

This chapter laid the foundations for the thesis. It introduced the research problem and research questions. The research was then justified, terms were presented, the methodology was briefly described, limitations given and the thesis outlined. On these foundations the thesis can proceed with a detailed description of the research.
CHAPTER 2
HISTORICAL CHANGES IN THE PERCEPTION OF THE VALUING OF TEXTILES EDUCATION THROUGH THE LENS OF THE THEORY OF REVITALIZATION

2.1 Introduction and chapter structure
This chapter outlines the literature and documents relevant to support the notion of the revitalisation of textiles education in NSW and the need to explore the valuing of textiles education in secondary schools. As the purpose of this study is to identify factors that influence the valuing of textiles education in secondary schools, the exploration of relevant issues was sought in literature and documents relating to five different areas of knowledge. This chapter will present literature to demonstrate the changes in perception of textiles education from a historical perspective and show at what stage the five different areas of knowledge became relevant to textiles education in NSW. Those five areas identified in Chapter one are Home Economics, Design and Technology, Visual Art, Occupational Therapy and Spirituality.

The historical focus is viewed through the lens of a ‘revitalization movement model’ of social anthropologist Anthony Wallace (1956). The interpretation of the information from this stand point assists in the viewing of the history of textiles education as waves of support followed by troughs of less enthusiasm and leads to the conclusion of the current state of textiles education within the revitalization movement. Chronologically this presentation follows through the history of needlework and home economics; the introduction of design and technology and the development of the technology curriculum; the contributions of the arts, nursing practice, occupational therapy, and the spirituality revolution. The chapter is structured to inform the conflict of debate between those who believe that textiles education is in revival and those who believe it is dying out.

2.2 The theory of revitalisation
Wallace’s theory (1956) was developed from an observation of discussion around innovation of whole cultural systems. He suggested that all the phenomena surrounding cultural system innovations had a common process that he described as ‘revitalization’. The cultural systems included hundreds of religious and technological movements observed through literature.
Kuhn’s (1962) notion of paradigm shift has been used to explain the cultural changes in educational administration during the last century yet Harris, Haulmark and Stansberry (2001) used Wallace’s theory to explain technology adaptation in variant organizational cultures (p. 147). Wallace’s (1956) theory allowed Harris (2001) to detail the stages of technology adaptation as well as to explore the social barriers and pressures that affect those stages. The relevance of this framework for the study of the valuing of textiles education was obvious at first glance.

The changes to textiles education in NSW have been produced by deliberate intent by those interested in its future and to those who value the study of textiles education for its contribution to secondary school students. A revitalization movement is a “deliberate, organized, conscious effort by members of a group to create a new culture” (Wallace, 1956, p. 265). This is how revitalization is different from evolution or historical change. Wallace (1956) made this distinction when he stated that “Evolution and historical change do not depend on deliberate intent by members of a society, but rather a gradual chain-reaction effect” (p. 136). For the purpose of this study I refer to textile educators as the members of the society they collectively form and the characteristics of the educational institution or school in which they teach as the culture that impacts on their behaviour.

From the initial discussions and questions regarding the possibility of a new syllabus for Textiles and Design, stage 6, support was generated from industry, TAFE, secondary schools, universities and the Board of Studies to survive its review for inclusion in the new Higher School Certificate (HSC). This was the first evidence, recently, of people from quite different areas of textiles making a deliberate attempt to support the future of textiles education in secondary schools. They identified with the society of textiles educators, yet there was dissatisfaction with the relationship of members within the culture (Duvernet, 2003).

Wallace (1956) spoke of revitalization as an organismic analogy (p. 266). This analogy refers to an organism being composed of many parts that are integral to its effective functioning. It refers to all systems human and non-human. So it is with textiles education that all the organizations listed above make a valuable contribution to the development of knowledge and to the experience of teachers and students. The
organisations that have supported textiles education throughout history change with
the stages of the revitalization movement. The theory considers

internal conflict among interest groups which results in extreme disadvantage
for at least one group; and, very commonly, a position of perceived
subordination and inferiority with respect to an adjacent society. (p.145).

This observation has great relevance to the history of textiles education as the
historical study will show. The changing of umbrella groups under which textiles
education has been organised also contribute to or detract from the available resources
to support the teaching of textiles in secondary schools. The core group of people who
maintain the culture of textiles education are those who have a passion for textiles
education and can see the benefits of textiles education and how those benefits impact
on the lives of those who participate in the culture. Participants may include those
who are the observers of the benefits of textiles education to persons within the
culture or those who may be touched by the gift of a hand made textile item or symbol
of cultural association. This may be in the form of a traditional dance costume, a
symbolic textile in traditional ceremonial activities like Christenings or church
services. According to Wallace (1956) revitalization is a special kind of culture
change phenomenon:

the persons involved in the process of revitalization must perceive their
culture as a system; they must feel that this cultural system is
unsatisfactory; and they must innovate not merely discrete items, but a
new cultural system, specifying new relationships as well as new traits.
(Wallace, 1956, p. 265)

Looking at the stages in Wallace’s process of a revitalization movement we can
identify the stages that textiles education has already moved through and the stages
that are yet to be experienced. Wallace (1956) describes these movements as
“reactionary and often begin with discontented cultural members, because traditional
institutions are unable to adapt and respond to social changes” (Wallace, 1956, p.
147). The evidence from the literature shows that although outside influences have
caused changes to how textiles education is presented to students, textile educators are
generally responsive to changes and have maintained an important part of children’s
education. Particularly the education of female students. The process stages of a
revitalization movement as described by Wallace (1956) follow.
2.2.1 Stage 1: The steady state
This stage was identified by an indication of some changes occurring in the culture, but the level of stress caused by the changes is manageable. Cultural change occurs during the steady state, but is of the relatively slow and chainlike kind.

Occasional incidents of intolerable stress may stimulate a limited correction of the system, but some incidence of individual ill-health and criminality are accepted as a price society must pay. (Wallace, 1956, p.147).

The valuing of textiles and women’s work was evident in the activity of providing convict women leaving Britain with fabric remnants to make quilts on their voyage to Australia (Gero, 2000). There was a belief that the activity was ‘good for the soul’ and gives the first identified link for textiles to a spiritual context. In earlier centuries before the industrial revolution hand sewing for occupational therapy in Great Britain was the past time of the wealthy. By the 1800s the majority of young girls were taught to sew in Britain and the traditional cross stitch sampler is evidence of the skill developed early in life. “Girls were not considered marriageable until they had mastered the art of stitchery” (Vainius, 1997, p. 1). This was an obvious facet of the British culture that was brought to Australia. Evidence of the needlecraft of children is held at The Embroiderers’ Guild of NSW at Concord. These articles demonstrate advanced skills in fine cross stitched alphabet and numbers samplers with a Christian message, the child’s name, age and date. One piece by Ellen Howe aged eight completed 7th June, 1831 contained the passage:

Jesus permit thy gracious name to stand as the first effort of an infant’s hand and whilst her fingers o’er the canvas move, engage her tender heart to seek name and write thy love with thy dear children let her have a part, and write thy name thyself upon her heart (SA31).

This was the second identified link to the spiritual context of needlework. The sampler was further embellished with colourful cross stitch floral motifs and border. This was a tradition that continued for many years in Britain and apparently worked with their mother or grandmother.

Another sampler with a similarly religious verse and decorative cross stitch motifs also contained the information –

Anne Mara Tubb work this sampler
At Mres Good School Kingsumbourne
And her schooling was given to her
And likewise her sampler and silk by
Her Grandmother Smith finished it
December 16, 1831 Aged 10 years (SA32).

Jean Peacock (1982) completed a comprehensive *History of Home Economics in New South Wales* that included early reports of the inclusion of needlework instruction to female orphans in the early 1800s. They were all taught needlework, reading, and spinning. Writing was given a lower priority. These skills were to prepare girls for domestic service. Obviously women in domestic service needed to maintain the garments of the household. Being so far from ‘the civilized world,’ so that most of the clothing was imported from ‘the homeland,’ there would be limited new garments available or new materials to make them. Providing the female orphan with these skills gave them a ready means of support and employment. Caroline Chisolm established a school of industry in Sydney in 1838. Needlework continued to be seen as a needed skill and worthwhile accomplishment. In the colony it was seen as a skill marketable in the workplace (Peacock, 1982). The basis of the lessons was established by Marianne Pulsford who prepared a sampler for classes one to ten in 1839. These samplers are held by The Australian Embroiderers’ Guild and contain basic running stitch, back stitch, and gathering to the application of fastening and embroidery stitches.

In the 1850’s there was concern that there was not enough needlework instruction in the country schools and recommendations were made to provide sufficient materials to ensure that each class of girls completed the essential training. From 1868 all female students who entered primary teacher training were instructed in needlecraft. If there was not a female teacher in the school, the wife of one of the male teachers was to instruct in needlework. By the 1870s a report by Inspector and Superintendent of National schools, W. Wilkins, recommended that needlework be put on the same footing as other subjects and require specialist teachers. Kyle (1986) reported that

**Needlework was indisputably a dominant theme in the public schoolgirl’s life, particularly since it gained new status and merit under the standards of proficiency issued in 1880. The relative importance of it**
was intensified in 1890 with the appointment of Annie Dadley as Director of Needlework (p. 47).

Dadley was appointed to report on the efficiency of needlework instruction in the Sydney metropolitan district. Kyle (1986) added that Dadley argued for better facilities for the teaching of sewing. There were no separate workrooms at this time. Although the department of education agreed that needlework was “important to both the home and the good of the nation” (Ibid, p. 48), there were no extra funds allocated to accommodate Dadley’s recommendations except for the classes at Fort Street Public School. The academic value of needlework was low and the teaching of the subject was not supported with needed resources but it “retained value as a propaganda tool… to support the school and state in various ways.” (Ibid, p. 50). The students’ work was used for fund raising at fetes with the money going towards school beautification.

Education officials were impressed by the increasing use of the sewing machine in homes and in industry. Despite Dadley’s objections to girls learning how to use sewing machines, by 1912 they were introduced to the primary syllabus for older girls. The provisions for needlework included sewing machines for the Fort Street Girls School, a leading girl’s school. Again the basis of this decision was for the girls to find profitable employment. The economic use of time and material that resulted from the use of the sewing machine fitted well.

Although needlework was a compulsory subject for every girl, adequate training of teachers came very slowly. During the depression of the 1890s the sewing teachers’ salaries were greatly reduced and so too was the number employed. The wives of the male teachers were expected to fulfil the four hours of needlework instruction if a specialist teacher or female teacher was not available. The shortage of teachers in the country areas had started to be addressed by willing teachers’ wives and in 1907 it was reported by the then Minister for Education, Peter Board, that “The teachers of needlework have advanced in their methods so that their lessons are more simulative of more intelligent work” and “Newly appointed teachers undergo a course of training under an expert in one or other of the larger schools” (p. 50). This beginning in textile education fostered the opinion that anyone could learn to sew and anyone who
knew how to sew could teach children to sew. Also in 1907 a report from J.W. Turner, Superintendent of Technical Education recommended the development of a Domestic College for women following an overseas survey including colleges in England, Holland and America (Peacock, 1982).

By 1915 needlework became a minor course in the teacher training program. The first group of students to enter as trainee teachers of needlework in public schools commenced in 1916. They enrolled in the Women’s Handicrafts course which included drafting, cutting, dressmaking, Whitework and millinery. The students were required to do a month’s industrial training. This was taken for a very small wage at David Jones Clothing Factory where they had the task of designing high class fashion garments. During the final year students attended evening lectures at The Teachers’ College undergoing general primary training. The first group of teachers was appointed to country schools for five years of service in 1919 (Peacock, 1982, p. 99). This is a model that is considered for discussion on the future of textiles teacher training in Chapter 8.

A review by a Directoress of Needlework praised the value of the subject for girls, suggesting it had:

…moral benefits for the public school girl…By its means the individuality of the schoolgirl is brought out and developed; it teaches them to embellish their homes; it inculcates habits of neatness and industry; it adds to the comfort of domestic life; and therefore proves itself a boon to the community at large (Kyle, 1986, p. 47).

Needlework continued to be taught in primary schools and by 1948 time tables for the National School were drawn up. Needlework was to be taught to girls Monday to Saturday for one hour each day. The syllabus in Needlecraft and Garment Construction was revised and implemented in high schools in 1954 and presented in four sections –i) Dress design Cutting and Making ii) Textiles iii) The History of Costume and iv) Embroidery. The preamble of the syllabus restated the accepted goals of industry, thrift, perseverance and accuracy. Creativity was also emphasised. Textiles education sought to develop the creative side of the child’s nature…and through the history of costume… an understanding of how the clothing of today has
grown out of the clothing of the past (Peacock, 1982, p. 72). The importance afforded to the subject in this period was soon to be diminished in the changing cultural climate (Hayes, 1998).

From 1952 there was a new influence and a bringing of new skills in the form of migrant women. The stories of Italian migrants creating textile pieces en route to the women’s new homeland were depicted in an exhibition at The Maritime Museum in September 2001. The works produced by women from 1952 to 2001 were stitched by women aged 22 to 72. The exhibition was titled Fare Il Punto and means “to make a stitch” (Rogers, 2001). The curator of the exhibition, Ilaria Vanni, was reported to say of the exhibition that the objects “link Italy and Australia in a very pragmatic way.” The works primarily contributed by the daughters of the textiles women honoured their mother’s crafts in paint. Only one of the daughters made a contribution to the textiles component of the exhibition. This was a quilt that was commenced in Italy and finished in Australia. The daughters saw the objects as a form of cultural heritage but they reinterpreted them in their art practice. This exhibition showed that whatever meaning is given to cultural heritage, it is not a nostalgic vision of something that happened in Italy; “It’s a contribution of Italian-Australian women.” This influence of the family experience on the value of textiles education prompted the inclusion of the question of activities carried out with family members in the student and textiles teacher surveys. The value of textiles in developing cultural awareness was volunteered by one of the teachers during her interview. The findings are reported in Chapter 6.

Textiles continued to be taught in primary schools by teachers with technical training through the 1950s and 1960s. These teachers completed four years at technical college and completed the same training as those planning to work as dressmakers. All female primary school teachers were also taught needlework. All girls were to have a needlework lesson per week from Grade 3 to Grade 6. This continued until the late 1970s.

The Hurlstone College was opened at Ashfield for female trainees in 1882. Before this time all the specialist teachers came out of Fort Street as pupil teachers and completed their training assisting Work Mistresses, as needlework teachers were
known. Mrs Dadley was appointed to prepare Work Mistresses at Hurlstone as she had worked at Fort Street. She set about establishing standards for needlework for all classes and periods of enrolment. These became the general standard throughout the state. She also adopted a systematic order for reporting on the trainees which included criteria such as manners and general appearance, ability to impart instruction in needlework, probable influence on pupils, ability to maintain discipline, and skill in plain sewing, cutting, fixing and in fancy work (Peacock, 1984).

2.2.2  Stage 2: The period of increased individual stress
In this period of the revitalization theory Wallace (1956) spoke of an agency being responsible for interference with the efficiency of the cultural system. There is continuous diminution in its efficiency in satisfying needs. Initial consideration of how a change can be made will cause more stress, further threatening efficiencies and the possible ‘mazeway disintegration.’ The mazeway is described as the accepted view of the majority. In the history of textiles education this increased stress appeared to develop when the study of needlework was combined with cookery under the organisational structure of Home Economics.

Teacher training for cookery did not commence until 1907 and from 1932 teachers of cookery and needlework were required to gain a Leaving Certificate and attend Teachers’ College for a two-year training programme concurrently with their technical training in cookery and needlework (Peacock, 1984). This is a model that has been adopted more recently by the University of Newcastle and Charles Sturt University for the development of textiles skills for technology teachers who would like to teach textiles in NSW secondary schools.

From 1924 the Departments of Women’s Handicrafts and of Domestic Science implemented a joint programme to train teachers of Home Economics for secondary schools. The new course included needlework subjects and a new course of cultural subjects. Fifty scholarships were offered to students of domestic science schools, three to high school students with the Leaving Certificate, and ten to those with the Intermediate Certificate. This training was to be carried out at technical college and included the program from both the preceding courses. A major step forward for Home Economics trainees occurred in 1932 they were required to gain a Leaving
Certificate and to attend Teachers’ College for a two-year training program. It was a demanding course as students attended technical college for their skill development and the Teachers College for lectures in chemistry, biology, physics, dietetics and textiles (Peacock, 1982, p.103).

The cost of providing facilities suitable for home science was a deterrent to its early development, but needlework could be introduced more economically. In the 1940s the Catholic Dioceses were offering home economics. In 1967 a three-year Diploma course was introduced at Sydney and Newcastle Teachers’ College. The Nepean College of Advanced Education and Hawkesbury Agricultural College also offered a Diploma in Teaching for Home Economics from 1973. These became four year degree courses in the late 1970s and early 1980s.

Newcastle Teachers’ College introduced its first home economics teacher training, similar to the Sydney programme, in 1954. Growth in the quality and depth of both courses followed. With the appointment of two faculty members from the home economics field to Sydney Teachers’ College in 1956 and one to Newcastle Teachers’ College in 1959, the Home Economics subject departments of the colleges began to develop (Kyle, 1986).

The two areas of food and textiles were no longer compulsory for home economics teaching in 1956, when the alternative options of second teaching subjects were offered to the students. Students given this option frequently elected Biology and Home Science and Art or Physical Education with Needlework, yet many retained the traditional subjects. These options continued until 1968 when it became evident that promotional opportunities in schools influenced students’ decisions.

The certificate course became a three-year Diploma Programme in 1967 and was offered in Sydney, Newcastle, and Nepean College of Advanced Education. Hawkesbury Agricultural College developed a Diploma in Teaching Home Economics in 1973. This was in a problem time for a subject that was contradictory to the societal trends at the time (Hayes, 2006). The most vital problem for the educators of teachers of home economics was the need for education broad enough to analyse social issues but sufficiently specialised to cope with the growth of knowledge in each
of the component parts of home economics (Peacock, 1982). This problem is exacerbated by the current positioning within the technology learning area. Instead of dealing with two technologies in home economics, the students studying to become design and technology teachers are faced with learning about six different technology areas.

The implementation of the Wyndham Report resulted in the re-organisation of the length of courses in secondary schools from five years to six and a “thorough review of the whole provision of schooling” (Peacock, 1982, p. 119). The Needlework Subcommittee directed needlework firmly into a place in the curriculum because of its educational offering, a view not generally accepted in all schools. The 1961 Needlework syllabus stated that

> The training in needlework is one facet of the over-all education of the girl as she moves toward womanhood and citizenship. It shares in the responsibility for the development of emotional stability, powers of self-direction and social competence (Preamble).

More than twenty years later Holloway (1984) also describes the household as a channel for diffusion of technology and a force in shaping the acceptance of technology in the form of tools and products that result from applied practical knowledge. Home economics thus mediates knowledge between the household and technological systems. Holloway emphasises a contemporary role for home economics as technology (p. 30).

In 1968 Kathie Amatniek, of the American Feminist Movement, announced the funeral for traditional womanhood. The traditional woman was seen as subservient and a threat to independent women, as men were seen to prefer quiet submissive women. The argument was that if there were no longer traditional women to attract men, men would have to accept that women were going to be their equal and men would share the domestic role (Amatniek, 1968). So women who enjoyed domestic arts were viewed as the enemy against female progress.

The Wyndham Report (1957) led to the Education Act of 1961 which changed secondary schooling from 5 to 6 years with external examinations after 4 years and 6 years of study. The act called for change in Home Economics to contribute to the
minds that will direct change. There was to be a greater science focus if the subjects
were to be accepted for matriculation. Home Science and Textiles and Design did not
gain recognition for university entry till 1974. The recognised status gave the subjects
a great boost in numbers with textiles enrolments for the Higher School Certificate
increasing from 179 in 1967 to 1,697 in 1978 (Peacock, 1982, p. 126). The popularity
of the subject may have also been as a result of the two periods of textiles craft that
replaced the compulsory eight period allowance of needlework. The good news was
that textiles and design was available to boys and could be chosen as an elective
subject in secondary schools to school certificate level. By 1977 6,000 boys were
enrolled in craft classes in NSW. More recently there has been discussion regarding
the contribution of craft to children’s education (Mason, 2004; Stevens, 2004). This
relevance of the provision of craft to secondary school students will be discussed later
in this chapter.

Evidence of the shame associated with knowing how to sew in the 1970s and 1980s
was seen in an article in popular press in March 2000 (Hooton, 2000). The article
spoke of ‘The Cotton Club’ a so-called secret society made up of intelligent
professional women who dared not tell anyone that they loved sewing in fear that they
would be labelled as old maids. Hooton (2000) spoke of her theory of the politics of
needlework. She noted that her mother, though artistic, never seemed particularly
interested in stitching of any kind, even though she suddenly revealed an astonishing
knowledge of French knots and satin stitch when her daughter showed an interest.

The point is that when women who did domestic science in the late
1950s graduated they were caught up in the feminist wave of the 1960s
and 70s, during which attitudes towards things like embroidery were
ambivalent. While some feminists celebrated it as part of women’s craft,
others saw sewing a button on a shirt as a sign of male oppression.
(Hooton, 2000, p. 33).

In the NSW Home Economics Association there was an increase in the tension
between members with a strong affiliation with the food course and those more
aligned with textiles and design. As a result the Textiles Educators’ Association was
formed in 1977 (Peacock, 1982). This conflict within women’s groups at the time was
not uncommon (Amatniek, 1968; Freeman, 1976). As the members of the feminist
movement could not agree on whether sewing and textile craft would be good for the image of women or not, the Home Economics Association as a women’s group would have had members who were passionate about textiles and those who thought it was no longer cost effective to make clothes or practise textile craft and could not see the benefits for the family beyond this criterion.

Four-year degree courses were made available in the late 1970’s in Sydney Institute of Education (Sydney Teachers’ College renamed), Hawkesbury Agricultural College, Nepean College of Advanced Education and Newcastle College of Advanced Education (Newcastle Teachers’ College renamed) (Peacock, 1982, p. 105). This was a time when emphasis was on the academic aspects of the curriculum. There was a strong focus on science in the Higher School Certificate Textiles and Design course and no practical assessment. Any provision of assistance by Home Economics teachers to the school in the form of catering or the provision of costumes for the school play was seen as derogatory to the primary role of the Home Economics teacher.

By focusing on a very small part of what Home Economics contributed to school and not promoting the component that is not offered by other subjects in the school - creativity, cultural connectedness and opportunities for success for even the lowest of ability students - Home Economics became marginalised. Numbers, particularly in textiles, were beginning to drop as the subject catered increasingly to students of higher academic ability without the increased subject status. Schools had provided differently for girls and boys from the time the colony was established in NSW until the 1970s. Differential provision was an explicit aim of education, acknowledging the different interests of boys and girls. Hayes (1998) commented on the curious change of focus from a gender orientated curriculum to curriculum for all. She found that this relatively recent shift in educational provision with such widespread ramifications appears of little consequence to the majority now. Hayes went on to say that the tendency to ignore this transformation may be attributed to an understanding of it as natural, transparent and self-evident. Further, she states that this type of history tends to portray “the period of differential provision as inequality and ignorant and the period of equitable provision as increasingly sophisticated.” It is Hayes’s opinion that in this context questioning how this shift came about is unnecessary because it is
attributed to the process of 'modernisation.' There are discussions to the wisdom of this shift in gender education later in the chapter.

Popkewitz (1997, p. 25) traces the positioning of “change as a natural and constant realisation of a higher order” to nineteenth century social evolution that drew upon eighteenth century ideas on natural history. Indeed it was during the nineteenth century that linear chronological accounts of the past emerged through the professionalisation of historical studies. Iggers (1997, p. 2) argues that central to the process of professionalisation was the firm belief in the scientific status of history. For historians, as for other scientists, methodologically controlled research made objective knowledge possible. Truth consisted in the correspondence of knowledge to an objective reality that constituted the past as it had "actually" occurred in a coherent sequence of events.

2.2.3 Stage 3: Period of cultural distortion
In this stage of the revitalization movement the prolonged experience of stress and anxiety over the prospect of changing behaviour patterns is responded to differently by different people. Disillusion with the mazeway or accepted view and apathy toward problems of adaptation set in. Some members of the society attempt to restore personal balance by adopting a scape-goating behaviour. Interest groups losing the confidence in the advantages of maintaining mutually acceptable interrelationships may coerce others into other advantageous positions. The movement is characterised by the growth of importance of charismatic leaders. At this time in the history of textiles education in NSW one such leader saw political opportunity in supporting the move toward Design and Technology and relinquishing the independent subject of Textiles and Design as had occurred in every other state in Australia. Hence the division of teachers into two groups: those who supported the move to Design and Technology and those who remained associated with Home Economics.

Textiles in the technology learning area
There appeared to be two driving forces behind the major changes to curriculum in the early 90s. One was addressing a perceived gender bias toward boys in education and the concern for Australia’s economic competitiveness in a world experiencing major technological change (Hayes, 1998). Yates (1996) uses the 'jargon' of post-structuralism in acknowledging 'that we have been constructing and deconstructing
[girls] in different ways' (p. 4). But even when wearing her 'postmodernist hat', she maintains a focus on the evaluative rather than the constitutive function of her framework (p. 4). Yates states that her 'concern is that any framework necessarily takes up some interests and disempowers others, and we need to try to uncover what voices and interests are being silenced in particular formulations' (p.4). In this way, postmodernism becomes another way of understanding and redressing inequity in education.

In a time of political and educational reform, it is not surprising that the experience of one student will be brought to the fore as a symbol of this reform process. The case of Melinda Leves in a challenge in the Equal Opportunity Tribunal in 1986 encapsulates the heightened emotion regarding equal opportunity at the time. In a newspaper article *Equality begins in the classroom* Debbie Coffey (1986) argues Melinda’s right to be able to study technics and technical drawing in the girls school she was attending. When Melinda Leves won her two year court battle in the Equal Opportunities Tribunal for recognition of sexual discrimination against the Department of Education, (Coffey, 1986) there was no mention of her twin brother’s discrimination in not being offered textiles. Melinda admitted in a revisit of the case that her twin brother could sew better than she could and she also had the choice of food technology, textiles and French that were not available at the boys’ school (Boalch, 1989). Five years after the win against the Department of Education, 70 Canterbury Girls’ High School students had access to the boys’ school for metal work, wood work and technical drawing. To Deborah Hayes (1998) the problem became evident that boys had displaced girls as the ‘educationally disadvantaged’ group.

Evidence of the economic rationalist rhetoric for curriculum reform is apparent in a letter from Dr Terry Metherell, Minister for Education and Youth Affairs to Dr F.G. Sharpe, Presiding Member, for the then Board of Secondary Education in 1988. In discussing the need for the Board of Secondary Studies to reconsider the major review of the secondary curriculum in a time when the Government was conducting public discussion on various aspects of the Education and Public Instruction Act, 1987, Metherell noted that the Board should take into account “current community concerns and the emerging economic priorities of Australian society” (Metherell, 1988, p.1).
The letter went on to include the guidelines relevant to the development of the technology learning area and textiles education in particular.

3. There should be a proper balance between theoretical and applied studies. Technical and vocational studies of high standard should be made available alongside more traditional academic courses.

8. Courses which have only attracted very small candidature over a number of years and hence cannot be justified on cost/benefit grounds should be scrutinised carefully with a view to their termination.

With textiles numbers waning, a high cost to maintain equipment and an orientation so gender-specific, it was considered that the senior Textiles and Design Syllabus’ days were numbered.

Following the Education and Public Instruction Act of 1987, the Honourable Nicholas Greiner, the NSW State Premier, announced on 16th September 1988 the establishment of a Committee of Review of NSW Schools. Recommendations were to be made to the Minister of Education and Youth Affairs by 31st August, 1989 (Carrick, 1989). The resulting report in September 1989 recommended the minimum curriculum requirements for registration of all schools and for all the compulsory years. The requirements encompassed the learning areas of English, Mathematics, Science and Technology, Human Society and its environment, Personal Development Health and Fitness, and Creative and Practical Arts. The Board of Studies was to provide syllabus statements which would give guidance as to the content, skills, attitudes and experiences to be included in each learning area.

Freedom of choice featured strongly in the report in the statement

The Committee sees its task as making recommendations conducive to the significant widening of access to a variety of schools. This improved access will enhance the opportunity for parents and others responsible for children to make what they deem to be the most appropriate choice of school for their children (Carrick, 1989, p. 3).

This freedom included access to schools within a region and the encouragement of resource sharing between schools and TAFE Colleges.
Development of technology curricula in Australia was influenced by the international call for attention to the technological capabilities of a population. Specifically, Government initiatives expressed in Dawkins (1988) and in the national goals of schooling (Australian Education Council, 1989) were supplemented by a national curriculum-mapping exercise designed to inform the development of national statements and profiles for technology. The report of the national mapping process (Australian Education Council, 1990) revealed varied understandings of technology across the States and Territories, this variety being consistent with key international discourses of technology (Peacock, 2000). International and national discourses of educational reform were legitimated by the 1989 decision of the Australian Education Council, a body composed of State and Territory Ministers of Education, to adopt Common and Agreed National Goals for Schooling (Peacock, 2000). Known as the Hobart Agreement, these goals are indicative of what Collins (1995) describes as “relentless pressure for a total national curriculum reconception” (p. 6). The goals refer to the need for education to respond to economic and social needs of the nation and to provide skills that will allow maximum flexibility and adaptability in future employment. The original goals have been revised (Ministerial Council on Education, Employment, Training and Youth Affairs, 1999). The 1999 Adelaide Declaration sustains the call for students to leave school with employment-related skills. Emphasis is placed on the need for young Australians to be educated for a world “characterised by advances in information and communication technologies, population diversity arising from international mobility and migration, and complex environmental and social changes” (Preamble).

Two further developments that followed the promotion of national goals for schooling in 1989 have been significant in justifying educational reform – a review of post-compulsory schooling and the development of national curriculum (Australian Education Review Committee, 1991). As part of the reconceptualisation of post-compulsory schooling, schooling was critiqued in relation to its ability to prepare students for the world of work. In 1992, the Australian Education Council and the Ministers for Vocational Education, Employment and Training adopted the Mayer Report, Putting General Education to Work – The key competencies report and promoted “competencies” as a means to narrow the perceived gap between general and vocational outcomes of education. The Mayer Report (1992) argued for a
workforce that displayed “creativity, initiative, entrepreneurship, and ability to think critically to improve workplace practices” (p. 2).

The development of national curriculum, following mapping of existing state curricula, established parameters similar to those informing state curricula. The nationally-developed curriculum grouped subjects into eight learning areas. The selection of learning areas made a clear statement about relative values accorded to knowledge in the curriculum. Some reflected established disciplines (e.g., English, Mathematics and Science), whilst other areas were collections of existing subjects (e.g., Technology and Studies of Society and its Environments). In a critique of these learning areas, Clarkson, Collins, Meyer and Thomson (1995) refer to technology as a “waste basket” curriculum category (p. 137).

The processes of justifying reform in New South Wales were the Report of the Committee of Review of New South Wales Schools (Committee of Review of New South Wales Schools, 1989a), followed by the release of Excellence and Equity: New South Wales Curriculum Reform (NSW Ministry of Education and Youth Affairs, 1989). The review of schools recommended courses of study across learning areas and this recommendation was adopted in Excellence and Equity. A learning area framework as opposed to organisation of curriculum by subjects was justified on the basis of maintaining “balance, breadth and coherence... without sacrificing flexibility” (p. 14). The concepts “excellence” and “equity” used in the title of the New South Wales curriculum reform statement and “excellence” as a stated goal of the Common and Agreed National Goals for Schooling (Australian Education Council, 1989) further legitimate the reform.

When the technology mandatory syllabus rendered home economics nameless within the technology framework, the majority of home economics teachers saw the change as a positive move and were happy to become technology teachers considering that the title would bring new status to the subject area, no longer a marginalized field of study classified as ‘women’s knowledge.’ To others it was a source of stress and a loss of their specialist area (Davis-Cotterell, 1991; Herbert, 1991a, 1991b, 1992, 1993; Cunningham, 1992, 1993a, 1993b). The name change did not change the nature of what is taught or the sentiment of the teachers teaching the subjects.
Peacock (2000) saw the move to technology as causing the demise of Home Economics in NSW as the totality of home economics knowledge and practice could not be fitted neatly into one of the eight curriculum Key Learning Areas, it was vulnerable to disintegration. Prior to 1989, the Home Economics curriculum encompassed content and strategies relevant to two further Key Learning Areas, namely Personal Development, Health and Physical Education and Human Society and Its Environment. Home economics as technology, saw home economics teachers teaching across faculties or their knowledge was appropriated to the other learning areas and is now taught by other than home economics teachers (p.17). It is also the case that the change to technology has allowed the influx of teachers from other teaching areas to teach textiles (e.g., visual arts teachers).

The main source of stress was the feeling of disempowerment from the imposed reform agendas initiated by bodies such as the Australian Education Council, a band of State and Territory Ministers of Education and education bureaucrats Peacock, 2000). Technology curriculum traditionally incorporates practical or commonsense knowledge, fitting Young’s (1971) low status category. Because the status accorded to this knowledge flows through to the status of teachers in the area and into contests about what forms technology education should take, the developers of the new curriculum seek to legitimate it by emphasising the “thinking” aspects of the curriculum.

Medway (1992) questions the rationale for Design and Technology, citing educational idealism, conceptual confusion, unrealistic aspirations and ideological loading as elements in “an outcome which is bizarrely radical and conservative by turns” (p. 65). He proposes that technology education should be about devices, “outcomes of and means towards technological activity” (p. 67); about bodies of technical knowledge and expertise; and about sociotechnical practices. Medway doubts the Working Group's claim that design and technology curriculum would prepare students to work in those fields where there is no one right answer to complex problems of everyday life, asserting “the fact that a problem [such as loss of employment] originated with technology in no way implies that design and technology capability will be appropriate in its solution” (p. 78).
The lack of precision in the initial curriculum was criticised, particularly in relation to definitions of technological capability and technology. Technology educators have made several attempts to influence these definitions. Drawing on the original Order for Technology, Cooper (1990) paints a comprehensive picture of technological capability as skills of investigation, implementation, evaluation and communication to be engaged through a “process of bringing about change or exercising change over the environment” (p. 62), knowledge of materials, energy and control and by making aesthetic, economic, technical and moral value judgments.

Technological capabilities encompass procedural qualities, communication qualities and value judgements. Capacity to adapt, modify, solve problems and make decisions is seen as a central contribution to human life in the coming century, as knowledge and skills prized in the past are taken over by technological devices (Peacock, 2000). Some technology educators frame their understandings of technology in terms of the economic needs of the nation. For example, Flood (1991) questions the appropriateness of a procedural interpretation of technology curriculum to meet the broader aim of strengthening the manufacturing base of Britain. He defines technology as “that which is concerned with the design and production of products or systems associated with the manufacturing industries” (p. 79). A definition such as this, argue Webster and Robins (1991), detaches technology from its social context and creates a general sense of acquiescence with the economic rationalist discourse. It is for this reason that I consider that an influence of the Home Economics characteristics of social connectedness continues in Textiles and Design and is demonstrated in the inclusion of Home Economics in the Value of Textiles Education Model (Chapter 1, Figure 2, p. 19).

Mulberg (1993) suggests that the avoidance of fixed definitions may have been politically motivated. He cites a section of the Technology Working Group’s Interim Report (National Curriculum Council, 1988):

We recognise that each of the terms ‘design’ and ‘technology’ can convey different meanings to different people....we acknowledge that some differences in perceptions of both ‘design’ and ‘technology’ exist and that ...
our image should...be easily understood, and where necessary readily
translated into their own terms, by teachers whatever their subject (p. 2).
The Textiles Educators Association was proactive in addressing the changes brought
about as a result of ‘Excellence and Equity,’ 1989. As Cunningham (1992) states
‘Who would have thought that the white paper Excellence and Equity would have put
under intense public scrutiny a curriculum area such as Home Economics which had
gained untold credibility since 1981 when Sydney University approved both Home
Science and Textiles and Design as matriculation subjects’ (p. 22). Herbert (1993) in
her argument to support her motion to change the name of the Textile Educators
Association to the Technology Educators Association (TEA) outlined the support that
the TEA had given its members in adapting to Design and Technology. She described
the activities from 1990 including the 1991 conference titled “Design and Technology –
our future.” The subject Textiles and Design was secure. The name change was to
support the other home economics colleagues who would no longer be teaching home
economics but demanded their entitlement to teach design and technology.

Medway (1992) is critical of the gathering together of a series of processes that are
not commonly grouped in the work world as “design”, claiming, for example, that
doers often design in their heads but rarely on paper and that designers seldom realise
their designs. He notes that design activities that are not technological are acceptable
learning activities but technical activities that are not design have been rejected in the
new curriculum. One such example is cooking, which is allowable in the curriculum
only if “wrapped up” in a design process. This anomaly reflects differential valuing of
the intellectual skills and the practical skills of the subject. Medway claims that much
that is technology cannot be addressed by a rationalistic means-end or systematic
design process but exists in “realms of practical activity not reducible to system and
logic” (p. 75). Practical activity may occur in practice situations that do not involve
design or technology. This is where the philosophy of technology differs from that of
home economics and textiles and design. In textiles and design the practical activities
may be part of the inspiration for design. Home economics, conversely, is
comfortable with skill and knowledge development without specific mention of
design.
Hendley (1996) argues that as a result of the lack of a rigorously argued educational justification for the inclusion of “design” in the National Curriculum, design remains open to criticism, yet it is design and design analysis that is credited for the higher order thinking offered in the visual arts curriculum (Hall, 2004; Gardner, 1999). As in New South Wales, teachers with a range of subject backgrounds deliver technology curriculum in Great Britain. Anning, Jenkins and Whitelaw (1997), in researching bodies of knowledge required in order for students to be able to design, conclude that teachers practise “eclectic pillaging” of knowledge from previous disciplines and this practice contributes to conceptual confusion and tension in technology classrooms. Similarly, Jones (1997) asserts that the diversity of knowledge bases underpinning the teaching of technology means that individual teachers employ concepts based on their own metaphors and therefore construct a particular technological reality in their classrooms. Jones (1997) suggests that the individual teacher's understanding is moderated by culture because “technological criteria [established by technologists] are used to judge the role of technology in human affairs. Views today on what it means to be technologically literate rest on such technological frameworks” (p. 263).

Stevens (2004) argues that the culture of technology can be quite alien to the craftsman, and the technologist has little understanding of hand-made objects. He suggests that both groups can benefit from an understanding of how each discipline can enhance education. Stevens (2004) cites situational cognition (Brown, Collins & Duguid, 1986) as the theory that best describes the benefit of craft to understanding: learning by doing. Importantly, technology is seen as a vital link for the communication of traditional craft for future generations. Textiles and Design provides a wonderful syllabus for the marriage of traditional craft with technology, where technology is not only seen as the means of recording traditional craft but is integral to new fabric design and innovative products that use sensor technology. There is acknowledgement of tradition and the contribution of many cultures (DuVernet, 2003b).

2.2.4 Stage 4: Period of Revitalization

As Wallace (1956) describes the process that initiates revitalization is one that follows the process of deterioration that can lead to ‘death’ of the society if not checked. Population may fall to the point of extinction, factional disputes may nibble away
areas and segments of the population unless there is a deliberate choice by the society’s members to make a change and survive.

At the turn of the twenty-first century humanity became more reflective, particularly about the future of education. Women had made enormous gains through Excellence and Equity as far as access to the male domain and are now “free to knit and not feel that they risk not being taken seriously. As can, and do, men” (Cummings, 2005, p. 53). Hooton (2000) states that she felt that the daughters, of the women who experienced the wave of Feminism, “basking in our equal opportunities and high-powered career status” (p. 33) are beginning to think that hand embroidered linen and French tapestry cushions are lovely, even though they can purchase ones made in Taiwan for a fraction of the price of making their own.

There is a rhythm to drawing a thread through a piece of fabric that is strange and absorbing – almost hypnotic. There is a sense of standing in a line that stretches back for centuries: thousands of years ago women were doing goldwork and making tapestries in exactly the same way they do today (p. 35).

**Sub-stage I: Mazeway (Worldview) Reformulation**

In this stage of Wallace’s (1956) revitalization movement the personal impressions of nature, culture, society, and body image (the recurring five) change as a result of the reflection on their current state. As with an organism, if a culture is under stress it has to make a decision to change the mazeway in order to reduce stress. Therefore there is a necessity to change self image, society and culture, nature and body, and ways of action. This change can occur with a brief period of realization of relationships and opportunities. These moments are often called inspiration or revelation and a ‘prophet’ or ‘dreamer’ emerges to provide people with a renewed self-image (p. 270). I would prefer to see these leaders as people with a vision for the future of textiles education.

This stage of revitalization is seen in the deliberate attempt by all those with an interest in the future of textiles education in NSW to make an effective change to the new Higher School Certificate (HSC) syllabus. In the process of developing the new HSC, all syllabuses in NSW were reviewed and assessed according to their
contribution to the total image of education for the 21st Century. Design and Technology had become the umbrella under which many of the senior technology subjects were expected to fit. In Victoria the study of textiles had become part of the larger Materials Technology subject area and there was no separate subject provided for the study of textiles. In Queensland textiles continues to be part of Home Economics without an independent subject for the study of textiles. (DuVernet, 1998b).

The new HSC had all syllabuses customised and integrated into a complete curriculum. The purpose of each syllabus had to meet the purpose of the HSC program of study to encourage students to complete their secondary education to

- foster the intellectual, social and moral development of students with the development of knowledge, skills, understanding and attitudes with a capacity to manage their own learning; desire to continue learning after school; work collaboratively; respect cultural diversity of Australian society; provide some preparation for employment and provide an opportunity to foster students’ physical and spiritual development (Board of Studies, 1999, p. 5).

As its preamble stated, the Textiles and Design Syllabus developed in 1980 for the Board of Senior School Studies

…develops a body of knowledge and experience which contribute to the liberal education of students in senior secondary school. The historical, social, economic and cultural aspects of the course provide a breadth of outlook and cater for the varied interests and backgrounds of students (p. 1).

This syllabus survived the Excellence and Equity report that had such a damaging effect on home economics and particularly home science. Where other subjects at the time were labelled for their gender stereotype, textiles and design with the highest percentage of female candidates of all the HSC subjects and depleting numbers did not come under attack, perhaps because the design component of the course removed from it the image of home sewers. It was also considered by the Board of Studies Inspector for Technology, Howard Kennedy, to be an important point of access to technological thinking for girls.
Unsolicited support for the continuation of the subject Textiles and Design for the HSC reported by Peacock (2000, p. 320), was said to indicate views of others outside of home economics being used to keep the discourse of home economics as technology in circulation. More than anything it was the textiles industry and technical training in NSW that rendered the greatest support with a wave of government support for the fading industry (DuVernet, 2003). The industry support for the continuation of the syllabus was important and it gave textile education in NSW an additional status in a climate where relevance to industry was considered an important outcome of educational programs.

The philosophical similarities and differences between the 1980 and 1999 HSC Textiles and Design syllabuses.
The 1980 syllabus, like all syllabuses at the time, stood independent of the development of other syllabuses. The status of subjects was enhanced by a strong scientific component, and so the 1980 syllabus had been divided into sections titled ‘scientific and technological aspects,’ ‘historical, consumer and cultural aspects,’ and ‘design aspects’ of textiles. Although the syllabus states that ‘Practical experience with textiles forms an essential component of the course’ (Board of Senior School Studies, 1980, p. 2) the only aim that remotely relates to the development of practical skills is to ‘develop skills in the use of textile materials’ (p. 2). This reference to developing skills in the use of textiles, rather than in the development of products, is the main philosophical difference between the two syllabuses and the decreasing numbers in the subject were ascribed to this position. As the main assessment of the 1980 Textiles and Design Syllabus was a theoretical examination, it was possible to teach the subject without the students completing any textiles projects (DuVernet, 1998b, p. 15).

The early syllabus was written on the basis of Thorndike’s theory on learning. Thorndike, as an early behaviourist, believed that educational practices should be studied scientifically (Hergenhahn & Olsen, 2005, p.54). He believed that the teacher had to know exactly what it was that they had to teach or else they would not know what material to present. There was consideration of creating a problem to enhance learning but this would be framed by the teacher with an anticipated outcome. In Thorndike’s theory motivation is relatively unimportant. The learners’ behaviour is
determined primarily by external reinforcers and not by intrinsic motivation. Emphasis is on bringing about correct responses to certain stimuli. Incorrect responses are to be corrected rapidly so they are not practised. In this theory examinations are important: they provide the learner and the teacher with feedback concerning the learning process. The role of the teacher is as a positive controlling figure in the classroom. It is the responsibility of the teacher to make learning “resemble the real world as much as possible” (Hergenhahn & Olsen, 2005, p. 72).

In the design section of the 1980 syllabus it was expected that students would experiment and create with textiles. These experiments would be guided in the Thorndikian way as quite prescriptive and testing known properties. In the Year 11 Design content of the course there was mention of experimentation with the elements and principles of design and the creation of embroideries as a result of that experimentation. There was also mention of devising aesthetically pleasing designs in clothing, using such methods as pattern development and draping (p. 6). The notes for the syllabus state that investigations may take a number of forms and included discussion, observation of man-made designs and designs of nature and simple experimental exercises using the elements of design.

The focus for production was on functionality and aesthetics and all discussion of design suitability started with the analysis of the requirements of an object to build a clearer mental picture of what it should be like…This approach will convince the student that design is a process and need not depend on genius, or a flash of inspiration (p. 22).

It was suggested in evaluating designs the students may be involved in the analysis of illustrated designs, examining particular garments for construction and suitability of design to purpose, examining a range of articles, and posing a problem and using experimentation to solve it: e.g., “knit garments may be laddered before leaving shop. Why?” (p. 23). This approach obviously had a strong consumer focus, and those who wanted to explore the creativity of textiles had the possibility of creating art to wear in Visual Arts time in schools, not is textiles and design unless the teacher organised additional time for practical project work in lunchtimes, after school or in school holidays (DuVernet, 1998b).
The study of culture was quite separate from that of design in the 1980 syllabus. It proposed more an appreciation of the techniques used but did make mention of cultural textiles as a means of self expression from an observer’s position. It was recommended that considering the roles and status of the artisans and workers in various societies would provide a means of interpreting aspects of the culture of those societies (p. 21). As the subject was assessed by an external examination with no compulsory practical assessment component the subject lost the students who loved textiles for its practical involvement and became dominated by students who enjoyed studying the science of textiles and colour and wanted to explore the cultural aspects of textiles from an observers perspective (DuVernet, 1998b).

DeVries and Zan (1996) stated that preoccupation with content had led to a situation in which socio-moral and affective development were negatively influenced. They saw it as ironic that a one-sided concentration on academic or intellectual development did not enhance understanding. In fact, they suggested that understanding was not enhanced by a concentration on intellectual development. Their position suggested that there was a need for an interpersonal connection with self, others, and the subject knowledge (p. 107). The constructivist view is that knowledge can not be transferred from teacher to students with a common understanding. Language is the most important tool for communication but it is through experience that the students develop an understanding of knowledge.

Although study of the Australian textiles industry was included in the 1980 syllabus it was optional in the section ‘Textiles and Society.’ The syllabus states that students were to select two of the three sections offered (p. 9). Along with ‘The Australian Textile Industry,’ was ‘History of the Textile Industry’ and ‘Culture and Textiles.’ As the teachers found the information for ‘History of the Industry’ and ‘Culture and Textiles’ more readily available, the majority of programs tended to follow that structure (DuVernet, 1998b). With the new HSC came a philosophical shift in the vision of students from being observers, evaluators and consumers to being innovative designers and manufacturers with an active role in the creative process and an economic understanding based on a compulsory study of the Australian Textiles Clothing and Footwear industry.
The new HSC Textiles and Design Syllabus (Board of Studies, NSW, 1999) development team embraced the philosophy of positive psychology and professional development that was introduced for the creation of all new HSC syllabuses, as it had been at the core of good teaching in the area of textiles and design as long as it had been taught. In its rationale it stated that:

Textiles and Design develops a body of knowledge, skills and values that contribute to the overall education of students and …develops student creativity and project management skills that promote self-esteem and satisfaction (p. 6).

The syllabus, with a brave new affinity to design and recognition as its own field of study, dropped the science titles and the need to validate itself with academic pretence, and named its sections appropriately as Design, Properties and Performance of Textiles and Australian Textiles, Clothing, Footwear and Allied Industries (p. 9). The design area continues to cover the elements and principles of design and the development of knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications, but its the second objective that speaks of the development of practical skills in design and manipulation of textiles through the use of appropriate technologies (p. 10). This strongly contrasts with the 1980 syllabus that suggested that the course would enable students to develop skills in the use of textile materials which suggests something more like developing skills in drying yourself off with a towel or wiping dishes than actually using the textiles to create something of value. The 1999 syllabus has made the study of the textile industry compulsory and the study of cultural textiles is addressed both in design and industry to meet the objective of developing an appreciation of the significance of textiles in society (p. 11).

**Sub-stage II: Communication**

Wallace (1956) refers to the prophets spreading the ‘good word,’ as is referred to in Christianity, as a revitalization movement. An indicator of this stage of revitalization is when people who believe in the vision for a better future communicate this vision to attract people and change the vision of those within the culture. In the history of events surrounding textiles education at the time the stage is evidenced by the
development of a number of textiles-related organisations seeking the support of others.

In industry the fall in numbers in professional associations is being addressed by the regrouping of these associations. One example is the joint conferences of the Textiles Institute (TI) and the Society of Colourists and Dyers of Australia and New Zealand (SCDANZ). The formation of the Textile Fashion Colour (TFC) Association in 2001 was an attempt to attract members from more diverse areas of the textile industries to enhance supply chain communication (DuVernet, 2003). When the Textile Clothing and Footwear (TCF) industries were strong the companies could not see the need for communication. As the industries have become weaker there has been a conscientious effort to develop strong communication along product management chains (Kisvarda, 2003). Further, practitioners who had never been aligned with the TCF industries, such as textile artists and costume designers were being included in TCF conference programs and workshops. This was evident in the Textiles Fashion Colour Association conferences in 2003 and 2004; and the Society of Colourists and Dyers of Australia and New Zealand conference in 2003. This move toward including textile artists and costume designers sees the overlap of textiles in the area of technology into the area of visual art. The move to more closely align these groups was a conscious effort from the visionaries in the industry who aimed to strengthen the TCF industries and include these creative arts areas in the study of textiles in secondary schools (DuVernet, 2003). The trend to strengthen professional associations in industry prompted the question in the initial textiles teachers’ survey in this study that asks about textile teachers’ membership of professional associations.

Sub-stage III: Organization

In Wallace’s (1956) view of revitalization the appeal of the new doctrine to the prophet and the followers is in considerable part based on the satisfaction of a need (p. 274). In Wallace’s view this stage is indicated by leaders within the movement being followed almost as demi-gods, as the revitalization movement is predominantly about religions of the world. I prefer to point to leaders who have accelerated the growth of interest in textiles education in NSW. This stage saw the growth of the number of people finding some aspect of textiles that they could relate to. The Visual Arts Syllabus has always included textile design, but the line drawn between the two areas
was far more distinct than has occurred with the new HSC Textiles and Design syllabus. The two areas will move even closer together philosophically with the retraining of visual arts teachers to meet the need to fill vacant positions for textiles and design teachers. The retraining of visual arts teachers as textiles and design teachers is examined more closely in Chapter 8.

The Visual Arts Syllabus in NSW lists as its aim
to foster students’ physical and spiritual development. In a holistic sense, experiences in creative activity offer engagement with material things and provide for physical actions (e.g., painting, drawing, constructing, building). The bringing together of ideas and materials invested with meaning may lead to spiritual significance in the art produced, and for the student. The study of artworks in historical and contemporary cultures reflects an ongoing interest in representations of the spiritual (p. 4).

The aims of the Visual Arts Syllabus that overlap with the philosophy behind the Stage 6 Textiles and Design syllabus are for students to
• value how their intellectual autonomy is advanced through the making of art and in the critical and historical investigation of art
• appreciate how the field of the visual arts offers insights about themselves, art and the world (p.14).

In visual arts students learn about the material, physical and virtual properties of the expressive forms and their significance and meanings within the traditions of the visual arts. Students learn how to work in a range of forms and learn how particular procedures are utilised in the forms. They learn about the potential of materials, processes, techniques, styles and qualities.

The expressive forms available to students include:
• two dimensional forms — drawing, painting, printmaking, graphic design, photography and digital media;
• three dimensional forms — sculpture, ceramics, textiles and fibre, designed objects and environments (e.g., wearables, jewellery, architectural design and product design);
• four dimensional works/time-based works — film and video, digital animation,
Textiles and fibre is offered in visual art as one of fifteen “expressive forms” (p.32). A work or series of works in textiles and/or fibre requires that 40% of time should be devoted to artmaking with consideration of the frames and conceptual framework. In HSC Textiles and Design the project accounts for 50% of the assessment, and therefore of the course time. In HSC Visual Art 40% of time should also be devoted to art criticism and art history. In HSC Textiles and Design the remaining 50% of time is allocated to theory as it relates to the properties of the materials used, the relationship to cultural and or historical or contemporary factors, and manufacturing specifications (p. 36). As one of the focus areas for textiles and design is textile art there is an opportunity to introduce more art criticism than is currently expected. In HSC Visual Art the remaining 20% of time may be allocated to any aspect of content depending on the interests of teachers and students.

In their Statement of Principles, the American National Association for Music Education (ANAME,1999) expressed a concern about the future of arts education and the value of arts education for every child. In the statement they outlined what they considered as six necessary principles to be applied to national education. These recommendations could well be true for textiles education. First, they state that every student in the nation should have an education in the arts from preK-12. They stipulated that

students must have a comprehensive, balanced, sequential, in-school program of instruction in the arts, taught by qualified teachers, designed to provide students of all ages with skills and knowledge in the arts in accordance with high national, state, and local standards (p. 3)

Second, to ensure a basic education in the arts for all students, the association suggested the arts should be recognized as serious, core academic subjects with the same academic rigor and high expectations as instruction in other core subjects. Third, as education policy makers make decisions, they should incorporate the multiple lessons of recent research concerning the value and impact of arts education.

The arts have been found to have a unique ability to communicate the ideas and emotions of the human spirit, connecting us to our history,
our traditions, and our heritage. The arts have a beauty and power unique in our culture (p. 4).

At the same time, a growing body of research indicates that education in the arts provides significant cognitive benefits and bolsters academic achievement, beginning at an early age and continuing through school (Gardner, 1990; Hall, 2004). Fourth, qualified arts teachers and sequential curriculum must be recognized as the basis and core for substantive arts education for all students. Teachers who are qualified as arts educators “by virtue of academic study and artistic practice, provide the very best arts education possible” (ANAME, 1999, p. 6).

Anecdotally, until recently, textiles experts attempting to qualify to teach in secondary schools, were given little recognised prior learning for TAFE qualifications and were required to complete nearly as many academic units as those straight from high school (DuVernet, 2005b). This will be explained further in Chapter 8. The suggestion that artistic practice contributes to the competence of arts teachers prompted the question in the textile teacher survey in this study that asked teachers for their qualifications and work other than teaching. As the American National Association of Music suggested, the fact that teachers have practical expertise they are more likely to develop programs that are designed to reach and teach all students, not merely the interested and the talented (ANAME, 1999). In considering the fifth principle to be applied to national education, ANAME suggested that arts education programs should be grounded in rigorous instruction, provide meaningful assessment of academic progress and performance, and take their place within a structure of direct accountability to school officials, parents, and the community. Textiles education in NSW is grounded in rigorous instruction, it provides meaningful assessment of academic progress and performance, and has made a place within a structure of direct accountability to school officials, parents, and the community. In-school programs that are fully integrated into state and local curricula afford the best potential for achieving these ends (ANAME, 1999). In NSW textiles and design is offered through a state syllabus that is offered to HSC level and used for the students’ university entry score.

The sixth principle suggests that community resources that provide exposure to the arts, enrichment, and entertainment through the arts all offer valuable support and
enhancement to an in-school arts education. In the case of textiles education in Australia, there are many community groups that support the teaching of textiles. As a matter of policy or practice, however, these kinds of activities cannot substitute for a comprehensive, balanced, sequential arts education taught by qualified teachers, as shaped by clear standards and focused by the content of the arts disciplines. In conclusion ANAME made a point in stating that there “is a demonstrated, direct correlation between improved academic performance and time spent studying the arts” (ANAME, 1999, p. 7).

Overall, writings in the last decade of the twentieth Century exhibited a significant trend that takes into account the major components of the aesthetic complex. As Smith (2002) wrote:

The task for a philosophy of arts education for the future is the harmonization of the components of creation and performance, object, experience, criticism and cultural context, and the task of research studies is to provide support for policy-making decisions (p. 31).

This philosophy is not too distant from that of home economics and demonstrates the overlap between arts education and home economics. There is a stronger focus on creation in art education and as this section will show it is an important part of well being that needs to be considered more closely in home economics.

In the United States, numerous school-based programs have repeatedly reported around the country that the study of the arts helps students think and integrate learning across traditional disciplinary lines (ANAME, 1999). In the arts, they learn how to work cooperatively, pose and solve problems, and forge the vital link between individual (or group) effort and quality of result. These skills and attitudes, not incidentally, are vital for success in the 21st century workplace. Sequential arts education also contributes to building technological competencies. It imparts academic discipline and teaches such higher level thinking skills as analyzing, synthesizing, and evaluating both personal experience and objective data (Gardner, 1990). The status of visual art and fine art is arguably greater than the status afforded to textile art and this has been recognised by a generation of visual artists who were conceived by a generation of sewers and seamstresses. In their exhibition ‘Sewing the Seas’ the artist daughters of migrant women who brought their traditional textiles
Finally, research findings indicate that arts education enhances students’ respect for the cultures, belief systems and values of their fellow learners. The contribution of textiles education in terms of respect for the cultures, belief systems and values of their fellow learners will be identified through teacher interviews reported in Chapter 5.

**Sub-stage IV: Adaptation**

Wallace (1956) makes a statement at the stage regarding the nature of the movement as a revolutionary organization that will encounter some resistance. He saw this conflict as coming from the sense that the interests of any one group could be seen as obtaining an advantage while only moderately reforming the status quo. This may be identified as attracting numbers back from HSC Design and Technology back to HSC Textiles and Design. ‘In instances where organized hostility to the movement develops, a crystallization of counter hostility against unbelievers frequently occurs and emphasis shifts from cultivation of the ideal to combat against unbelievers’ (p. 275). The response of the movement leaders must be to defend the movement with a “diplomatic maneuver”(p.150). There was evidence of opposition to the new HSC Textiles and Design Syllabus and this opposition was counteracted by the enthusiasm of the leaders of the revitalization movement. The benefit of criticism is that it provokes greater reflection and the strengthening of the case for the revitalization movement.

As this stage of a revitalization process suggests that some textiles teachers will oppose the changes that the leaders have imposed. Some will adapt with further education, and some will adapt by protest and stop teaching the subject. This stage prompted the question in both the textile teachers’ and head teachers’ survey in this study regarding the subjects that the teachers are qualified to teach and the subjects they actually teach. In this stage teachers need to gather valuable information that can convince them of the benefits of the changes to the curriculum (DuVernet, 2003). In many schools there had been a commitment to only offer textiles education at HSC level within the subject of Design and Technology. When there were not enough students in schools to form a separate class for Textiles and Design it was seen as an
advantage to combine these students with those who were electing to do Design and Technology where it was suggested that all their needs could be satisfied.

The diplomatic maneuver in this instance may well be to promote the advantages of textiles education in the light of emerging educational trends. As the numbers enrolling in HSC Textiles and Design are increasing (Board of Studies Statistics 1999-2006), competition to form classes will be less of an issue.

Sub-stage V: Cultural transformation

If the movement at this stage is able to attract the support of a substantial proportion of the population the transfer culture can be put into operation (Wallace, 1956). The revitalization will be accompanied by a decline in opposition. The movement must be able to maintain its boundaries from outside invasion and must be able to maintain internal social conformity without destructive coercion. It was also suggested that the new culture must also have a successful economic system. The cultural change in schools will depend on the new teachers developing an appreciation for the valuing of textiles education in school and communicating that message convincingly when they commence teaching.

As a whole or a controlling part of the population comes to accept the new religion…a noticeable social revitalization occurs (Wallace, 1956, p. 275).

In this stage I propose the changes that could occur in schools and in society as a result of the acceptance of the valuing of textiles education. I propose that this state of revitalization of textiles education has begun in some secondary schools across NSW.

The introduction to the stage of cultural transformation in the revitalization movement highlights the areas of concern that need to be addressed in order for this revitalization to be successful. The majority of textile educators need to be able to stand firm in the commitment to the future of textiles education. The knowledge of the benefits noted through the contribution that can be made in the expressions of spirituality in education and the findings of researchers in nursing provide a strong hitching post for textiles education in the current educational climate. The issue of the cost of textiles in school is a question that is addressed in the data collected from teachers.
There are number of factors that will affect the outcome in this stage of the revitalization as it stands. Literature on these factors follow.

**Spirituality in education** is controversial yet much is being said by world-renowned teachers, visionaries and spiritual leaders about the heart of learning rooted in the spirit and an “entrenched sense of disconnection” (Glazer, 1999, p. 10) that has developed in a consumer society (Glazer 1999; Gardner, 1999; Hansen, 2001; Macbeath, J. & Mortimore, P., 2001; Chater, 2005). The trend toward holistic education (Jarvis, 2005) or examining multiple intelligence (Gardner, 1999; Veins & Kallenbach, 2005) is attempting to examine learning as a total experience beyond the specialisations of separate disciplines and the artificial divide between learning associated with hand or with mind and body (Jarvis, 2005).

Spirituality has been described by several theorists and researchers (Harris & Moran 1998; Hay & Nye 1998; Tacey 2000, 2003; Hall, 2004) as having a relational and communal character; that is, a sense of connectedness to the human and non-human universe. Certainly, the term ‘spirituality’ has crept into the language used by social workers (Lindsay, 2002), mental health workers and other professionals who work with young people. For instance, the 10th Annual Conference on Suicide prevention in Australia, 2003, had as its theme *Finding meaning to sustain life: the role of spirituality in suicide prevention*. Indeed, this is not an isolated Australian occurrence but is something that has become evident in other parts of the Western world as professionals from different fields grapple with the problems that afflict their young people. In September 2003, the US report of the Commission on Children at Risk, *Hardwired to Connect: The Scientific Case for authoritative communities*, has identified the rising rates of mental problems and emotional distress among US children.

The NSW Board of Studies attaches considerable value to students’ spiritual development by including the words in the purpose of the new HSC (1999) that is discussed in more detail in Chapter 3. In NSW, it appears that the mention of spiritual development in the new HSC is nominal as there are no documents that clearly define what is understood as spiritual development in this context. The Adelaide Declaration on National Goals for Schooling in the Twenty-first Century (MCEETYA, 1999) that
was endorsed in April 1999, states the Goals for Schooling originally launched in Hobart in 1989. In NSW, spirituality is one of those common elements which is not the preserve or sole responsibility of religious education but is cross-curricular in nature, and is the concern of the whole curriculum. The inclusion of spirituality in the purpose of the new HSC was reported by a Board of Studies representative to have developed out of McGaw’s (1996) report, yet there appears to be few if any systems in place to check that this inclusion is acted upon. Coincidentally in 1996, the same year as the McGaw Green Paper, Their Future – options for reform of the HSC, a book was published by the Centre for the Study of Australian Christianity titled Reclaiming the Future, addressing the need for Australian society and education to reclaim Christian values (Lambert & Mitchell (Ed), 1996).

The fact that there is no definition given for ‘spiritual’ one has to ask, who is responsible for students’ spiritual development? Should it be an important role for religious education when religious education is not a compulsory part of all Australian schools? It has been argued, as a role for art education (Hall, 2004) and, as I will argue, a role for textiles education. The UK has taken a far more structured approach to the goal. As a part of a broader concern with young people’s personal development and their preparation for life in society, the UK’s Education Reform Act of 1988 gave birth to the National Curriculum, a principal aim of which was to require that each school

a) promotes the spiritual, moral, cultural, mental and physical development of students at school and in society; and

b) prepares such pupils for the opportunities, responsibilities and experiences of adult life (Section 1(2)).

In the UK, religious education is a compulsory part of the National Curriculum. In 1992 the Education (Schools) Act stated that the Chief Inspector for England shall have the general duty of keeping the Secretary of State informed about the spiritual, moral, social and cultural development of pupils at those schools. (Cited, Ofsted, 2004, p. 6)

In 1996, the then Schools’ Curriculum and Assessment Authority (SCAA) in the UK created the National Forum for Values in Education and the Community. It suggested that the students develop spiritually by “learning to value themselves; learning to
value relationships; learning to value society; and learning to value environment” (SCAA, 1996). It was also stated that spiritual development was important to students in that:

A spiritual sense can be seen as a prerequisite for learning since it is the human spirit that motivates us to reach beyond ourselves and existing knowledge to search for explanations of existence. The human spirit engaged in a search for truth could be a definition of education, challenging young people to explore and develop their own spirituality and helping them in their own search for truth (Ofsted, 2004, p. 11).

A school’s effectiveness in ensuring the spiritual, moral, social and cultural development (SMSC) was reiterated in the School Inspections Act 1996 and the duty on schools to promote pupils’ SMSC development was restated in the Education Act 2002. An inspection framework was introduced in 2003 by the Office for Standards in Education (Ofsted, 2004). The examples of policy and practice in the UK are used in this study as characteristic of approaches to spirituality in a variety of contexts. As explained in Chapter 1 the term spirituality was defined in the National Curriculum Council (1993) discussion paper on Spiritual and Moral Development as applying to something fundamental in the human condition which is not necessarily experienced through the physical senses and/or expressed through everyday language. It has to do with the universal search for individual identity – with our responses to challenging experiences, such as death, suffering, beauty and encounters with good and evil. It has to do with the search for meaning and purpose in life and for values by which to live (p. 3).

This definition was modified to develop an inclusive working definition that respects pupils’ varying religious and other backgrounds and forms the basis for the judgement of how well schools address spiritual development. The final definition states:

Spiritual development is the development of the non-material element of a human being which animates and sustains us and, depending on our point of view, either ends or continues in some form when we die. It is about the development of a sense of identity, self-worth, personal insight, meaning and purpose. It is about the development of a pupil’s
‘spirit’. Some people may call it the development of a pupil’s ‘soul’; others as the development of ‘personality’ or ‘character’ (Ofsted, 2004, p. 11).

This definition was useful in interpreting data that did not specifically mention the value of textiles education’s contribution to the spiritual development in students. It provided an indicator to comments from teachers regarding the contribution textiles education makes to a students’ sense of identity and self-worth.

Hall (2004) found that spirituality is inextricably linked to creativity and the creative act. “Creativity, imagination, making and appreciation are spiritual in nature and contain elements of spirituality” (p. 144). Hall also stated that art education’s contribution to students’ spiritual development is unique in some respects but also overlaps or is shared with other subjects. Hall (2004) also argued that the experiences of making and responding to art are essential to our spiritual wellbeing, and that learning, as a creative process, is also spiritual in nature. Furthermore, artworks have the ability to reach across time and tell us what people from other times and places thought, felt and believed, and art plays an important role in students’ multicultural and religious education (p. 144).

“Spirituality,” as defined by UK government agencies relate to Delors’s (1996) domains of spiritual wellbeing. It was his belief that spiritual health is a dynamic state of being, shown by the extent to which people live in harmony within relationships. Spirituality in education continues to raise debate and was featured in The Routledge Farmer Guide to Key Debates in Education (Radford, 2004). This book maintains that there are three courses of action open to us. The first is to argue that spiritual education is adequately contained in the moral, social and emotional development of pupils, identified in personal, social and health education and in the social and moral ethos of the school community (p. 88).

In the UK there is a requirement that this spiritual education is overt and supervised under the Education Reform Act (Radford, 2004). There is no such provision for
supervision in schools in NSW. The second course of action is to induct students into some form of religious faith within a faith-based school. This is indeed the case in NSW in Presbyterian, Baptist, Jewish, Muslim and Catholic colleges, yet there is no such provision in government schools. The third approach is in developing a ‘sense of God’ in a ‘godless society’ by the deconstruction of experience and to see whether we can find any basic common points of principle that underlie it – principles that might have relevance in the lives of our pupils. Being able to connect with students on a spiritual level has been shown to create the difference between success and failure, a sense of belonging or of being alienated. In the following chapter literature was sought to uncover how good teachers create this sense of belonging in the students.

In a study of what makes a difference in helping difficult young people stay in education, a medium-term follow-up report by deSouza et al. (2001) found that in an examination of a whole range of factors associated with interventions and prevention, no particular strategy or professional skill stood out as making a distinctive difference. In looking at successful cases there was mention of ‘some woman came around’ that recognised individual strengths and ability and empowered the child to make choices and build on that strength. In textiles and design, students have the opportunity to develop an appreciation of the significance of textiles in society. Those who see the spiritual contribution textiles makes to society are reconciled. The idea that ‘idol hands do the devil’s work’ is turned around by the philosophy described by Seeveld (1980) that suggests that by offering people a practical activity

…means to pull out of unrighteous forming hands whatever they are busy with and bring it back to The Lord, back in line with his ordinances (p. 39).

This was obviously the intention of mothers and grandmothers who set their children to work on cross-stitch samplers that included bible passages (Cavanagh, 2004).

British Prime Minister Tony Blair regards low self-esteem as the most destructive cause and effect of social exclusion, making it important for the welfare state to confer recognition and make people feel valued (Ecclestone, 2004). Textiles circles have been shown to be inclusive and rewarding and contributing to self-esteem. A study of community development for mental health (Bazeley, 1980) found that a sewing group in a disadvantaged community provided a very concrete basis for
changes to self-concept, quite apart from the spin-off effect of enhancing members’ financial situation and family relationships. Initially people worked with donated remnants, then bought their own material if they wanted something special. There was plenty of opportunity for friendly chatter while they were at work (p. 112).

Much credit has been given to art as a means of actively involving students without purpose but little has been said about the same contribution made by textiles. With much of the activity of art being identified as “a unique and non-verbal means of responding to experience and communicating that response through a visual statement” (Hall, 2004, p. 149), we would have to conclude that the clothes worn by various street cultures and those dressing in traditional costume could be viewed as art. Alternately, we could say that art is not unique in its ability to transmit non-verbal communication but that it could be said that textiles is unique in its ability to communicate a visual statement of belief in every aspect of life. After all, not all artists carry or wear their art. Their only means of communication is to those who visit their exhibitions or view their art work through publications or in their displays to friends and families in their own homes.

Australian quilter Nerida Richmond Benson worked as an anaesthetist in the USA and Canada which began her love affair with quilts and quilt making in 1971. Inspired by the work of her mother and aunties as a child, quilt making has become the creative core of her life.

It has been with me through the good and bad times; it has been a focus for my energy, food for my mind and balm for my soul. I hope that my quilts and their stories will be my legacy for my three daughters and their families. My wish is that I may leave something of beauty and usefulness behind for them to enjoy (Quilts Down Under, 2006, p. 64)

This highly intelligent woman acknowledges the contribution that textiles has made to her life and to her family. With such an impressive career, she values the contribution that her quilts will make to her memory more than the memory of her contribution to medicine.
In an interesting change of perception and an obvious indication of the growing value of textile art and the appreciation of textiles skills, Flossie Peitsch, a fine artist who has exhibited in water colour and sculpture in the past has found her popularity growing out of her change of media to textiles. In her most recent exhibition of works ‘Homemade: Locating the spiritual self in family space’ (2005), Peitsch has drawn from the seemingly unpretentious and reassuring world of family and home. Yet on a closer look these “handmade” objects take on a power to challenge our notions about where we locate the spiritual self and how we identify it. She has also found a growing body of women who link into her workshops that incorporate spirituality in the outcomes. In her critique of Peitsch’s exhibition, Claire Renkin (2005) stated that

For most of us the question of how and where we find and recognise the spiritual has moved beyond the predictable confines of church. Some of us are reaching beyond the physical spaces… seeking to make sense of our experiences. And in that seeking to make sense of our individual story by relating it to a deeper, richer, universal narrative, we encounter the spiritual (p. 1).

There is a feeling among those who are passionate about their textiles that they are linked back through the centuries (Hooton, 2000) and the practice of embroidering biblical passages on embroidery samplers was definitely contributing to the sewers’ religious education.

**Spirituality in teaching and learning**

In his book *The Heart of Learning* Glazer (1999) spoke of “the great tragedy that has taken place in public education: the wholesale abandonment of the inner world” (p. 2). He believes that this has been a reaction to religion as indoctrination and imposition. He went on to suggest that by avoiding the ‘inside,’ awareness of self and knowledge of the complete person is lost. Dyer (1992) states that our greatest teachers, and those who have made the greatest impact on humanity have been spiritual beings (p. 33).

The factors that he identifies with the great teachers as spiritual beings are their belief in loving guidance. They are motivated by ethics, serenity and quality of life, they feel a sense of responsibility, and they live a life of forgiveness (pp. 46-47).
Glazer (1999) suggests that spirituality in education is about intimacy with our perceptions, thoughts and emotions as they relate to body, mind and heart and is ‘rooted in experience.’ He believes education can act as the core to a lifelong journey to wholeness rather than an accumulation of facts, figures or skills (p.3). By encouraging awareness and connectedness, students can develop a sense of the sacred, not tied to any one religion, but a call to ethical and moral behaviour (p. 10). The question asked is “Are individuals healthier, happier, and more aware as a result of education?” Education needs to awaken the students to inner positive qualities and the fundamentally pure mind (Rinpoche, 1999).

In recent years, much of the literature that focuses on holistic and/or spiritual education (for instance, Moffett 1994; Kessler 2000; Miller 2000) have also suggested that the traditional approaches to education and school settings do not sufficiently address the spiritual needs of young people. Moffett (1994) argued that spiritual education centres on personal growth, which will solve more social ills and material problems than any other sort of educational orientation (p. 331).

He acknowledged that, for some people, any talk of spirituality is a problem because it is perceived as having links to religion. While Moffett (1994) acknowledged that any talk of spirituality is a problem for some people because they perceive it as being closely connected to religion, he argued that spiritualizing education is intended to include everyone regardless of their perceptions of other worlds or otherworldliness because it alerts us to the need to be good to others in order to improve our own lives. Ultimately, Moffett argues that spiritualizing education is a much needed reform (p. 17).

In Britain, Canada and the United States, one response to the problems of young people has been the acknowledgement that many educational programmes, which are largely focused on cognitive learning, do not cater for the emotional and spiritual needs of school children. Additionally, the four ‘pillars’ of lifelong learning identified by UNESCO—learning to live together, learning to know, learning to do, and learning to be—have some aspects that support the concept of a spiritual dimension in education (Delors 1996, pp. 20–21). Of significance is that the relevant educational policies in Britain have been directed to religious and secular schools alike with the
direction that “‘spiritual’ is not synonymous with ‘religious’; all areas of the curriculum may contribute to pupils’ spiritual development” (Office for Standards in Education, 1994). Thus, these policies clearly reflect the growing trend to treat the religion and spirituality as separate entities.

Education from a Buddhist perspective is about developing compassion and love, and the understanding that knowledge and wisdom is in all of us (Rinpoche, 1999, p. 55). Hayward (1999) sees our obsession with materialism as so entrenched in the education of our time that consciousness has been reduced to brain function (p.65). This constitutes the other end of the spectrum, the physical basis of the human experience. Further, Hayward states that it is possible to bring energy from the non-physical world into our world as it manifests in our passions. “Find your passion, express it, and that way you will attract the muses, the gods and goddesses of creativity” (p. 72). So there are many questions arising related to our very nature as human beings and where our inspiration comes from.


spirituality as a private matter, …But our youth are increasingly finding this attitude frustrating…It does not provide them with life-enhancing values, but merely encourages an attitude of intellectual inquiry in which the moral and spiritual foundations of existence are never affirmed (p. 187).

Tacey goes on to define how youth understand spirituality as “that which touches them, encourages them, and urges them to take part in an unfolding sense of mystery” (p. 189). He claims that students experience spirituality apart from any religious tradition and suggests “there is a cultural revolution in the making” (p. 191). Tacey explained this “outbreak of spirituality” as “a desperate attempt by youth culture to support itself against the encroaching tide of destructive materialism” (p. 193). Jeremy Hayward (1999) referred to the way science is taught in schools as a “doctrine in materialism, which is fundamentally anti-spiritual…and has become the religion of our time” (p. 76). Glazer (1999) suggested that by sharing with our students a real sense of presence, we play an important role in “combating the materialism of contemporary culture” (p. 248). He suggests that spirituality in education step beyond a surface material view to a view of wholeness and an ethic of engagement and
responsibility. Tacey (2000) suggests that this process begins with the recognition of our spiritual emptiness compared to the spiritual richness of the Aboriginal culture and remains a symbol of spirituality in the Australian mind. He believes as more people realise that they have been living on the surface of life, they will begin to search for missing richness, which is characterised by such words as ‘soul’ and ‘spirit’ (p. 43). In the question of the value of textiles, opportunities to enrich lives and develop spiritual awareness will be reviewed from data collected from textiles teachers and textiles students in Chapter 7.

Gatto (1999) argues that the criticism that students are unmotivated and resist learning is nonsense. He agrees that students resist teaching but believes that ‘nobody resists learning’ (p. 156). He believes that “schooling alienates us from our inner genius” (p. 157). He went on to say that

rational thought is valuable but it misses the deepest properties of human nature: our feelings of loneliness and incompleteness, our sense of sin, our need to love, our longing after immortality (p. 160).

The frustration students experience in the classroom may well be the feeling of alienation. Gatto (1999) explains his understanding of the difference between schooling and education.

The goal of education is to bring us to a point where we can take full responsibility for our lives (p. 61). Schooling is an instrument to disseminate…data…ignoring the universal human awareness (p. 162). Schooling needs to make connection with the human spirit on the road to self-knowledge in developing a trust in self and self-liking (p. 167).

Textile activities encourage experimentation, decision-making and the experience of creating something of beauty that reinforces a trust in self and encourages self-liking.

In an attempt to gauge the spiritual well-being of young rural Australians, de Souza, Cartwright and McGilp (2004) interviewed twenty-two young Australians aged 15 to 20 living in rural Victoria. The authors suggest that educators and parents need to address the spiritual wellbeing of young people from an early age and create the opportunities for young people to address and express aspects of their inner lives.
Textiles in nursing practice and occupational therapy

In assessing the value of textiles to leisure time Bazeley (1980) said that the way in which a woman occupies her leisure may both affect and reflect her mental health, for example, whether or not she is able to relax; whether she has any positive or creative interests to provide stimulation (novelty and variety) in the time not occupied by the largely routine work tasks of this population. Indeed the wide endorsement of occupational therapy for psychiatric patients would suggest that the acquisition of positive leisure activities does have relevance to mental health (p. 109).

Occupational science is grounded in the concept that people are occupational beings and that on a day to day basis, occupations are used as the basis for quality of life, wellness, empowerment and social equity (Ross & Hill, 2005). The value of textiles through emotional difficulty was also expressed. It was described as “a private thing: a private way to be sad or keep your hands busy” (Hooton, 2000, p. 35). The value of having something to show for effort was mentioned. Many women live frantic lives in high pressured jobs that show little for the day of stress. Women who sew know that something beautiful will emerge from their commitment of time to their creative outlet (p. 33). Clair Cruikshank who celebrated her 100th birthday in March 2006, sews and knits and credits her longevity to “always having something to do” (Branley, 2006, p. 9).

Studies show that creativity and spirituality can heal by changing a person's physiology and attitude from one of stress to one of deep relaxation (Lane, 2005b). When the brain perceives an image of a peaceful scene or engages in creative work, it alerts parasympathetic arousal. Heartbeat slows, blood pressure drops, breathing slows, blood goes to the intestines, and the body shifts into deep relaxation (Benson, 1975).

Creative endeavours also stimulate the hypothalamus to activate the autonomic nervous system, which balances and maintains blood flow, heart rate, and hormone level (Lane, 2005b). In addition, the creative process can cause specific areas of the brain to release endorphins and other neurotransmitters that affect brain cells and the
cells of the immune system, relieving pain and triggering the immune system to function more efficiently. Endorphins are like opiates, creating an experience of expansion, connection, and relaxation. In conjunction with these physiological changes, art and meditation regularly change people's attitudes, emotional states, and perception of pain (Benson, 1975). Benson has found that when people engage in creative or spiritual acts, even as passive observers, the process creates hope, restores optimism, and helps them cope with debilitating problems. This finding is valuable in the development of a program for disconnected school students and will be discussed in Chapter 9. Neurophysiologists now know that art, meditation, and healing all come from the same source in the body; they are all associated with similar brainwave patterns and mind-body changes (Benson, 1975).

Qualitative accounts of the creative process suggest that textile art making is a multi-dimensional experience (Reynolds, 2004). From a limited body of previous work, textile art has been inferred to be restorative through its tactile qualities and through the quiet and focused nature of the occupation (Howell & Pearce, 2000). It can also provide a measure of comfort and security through linking people to previous traditions and rituals (p. 59). Case studies suggest some people use textile art to symbolise their journey through a healing process (Reynolds, 2005).

**Sub-stage VI: Routinization**
If the group action program is effective in reducing stress generating situations it becomes the accepted norm. Once the desired transformation occurs the organization contracts and only maintains responsibility for the preservation of the new accepted perception of the value of textiles education. I see the organization as providing the momentum that has developed from a number of areas in teacher training and community interest. This is the dangerous stage for the movement unless momentum of the revitalization is maintained until the new steady state is established.

New issues can threaten the revitalization movement. These threats include:-
- the availability of adequately trained teachers to support the growth of enrolments in HSC Textiles and Design.
- the support for teachers teaching HSC Textiles and Design for the first time in many years.
• the recognition of the contribution textiles education makes to the students studying textiles at various levels in secondary schools.

These issues are addressed in the school survey to secondary teachers and some background literature to these issues follow.

education literature that examines the qualities of good teachers and effective teaching and learning considers the social situation, learning construct and the concept of human beings, both being and becoming through lifelong learning. It is a holistic approach that identifies the dimensions of knowledge and skills, the emotional dimension of feelings and motivation, and the social dimension of communication and cooperation (Illeris, 2005, p. 88). The intention is to offer the student a relevant context so that they can feel connected or be able to relate to what is being taught, resulting in a positive school culture (Glaser, 2003; Nieto, 2003). Powers (2003) proposed that by creating the positive school culture the joy of teaching will be revived in its teachers. The classroom motto that epitomized the creation of the positive culture was given as “Attitude is the mind’s paintbrush; it colours any situation” (p. 178). Reflecting on attitude and practice has been an effective strategy for teacher development for some time and continues to be considered as a powerful pedagogical strategy in initial teacher education (LaBoskey, 1997; Wilson, 2005). The inclusion of this literature informs the development of courses and strategies for the preparation of future textile teachers.

One voice, for the value of fabric craft in connecting with female students, is Stalker (2005) who stated that “It perplexes me that they [fabric craft and fashion] have not been used more often among facilitators as a starting point to engage learners” (p. 168). Further, Stalker claimed that “Fabric and fabric crafts offer women a way in which we learn our identities” (p. 174). Hood (2001) suggested that fabric craft work is an important way in which we learn about, preserve and support the dominant cultures and, indeed, colonise other cultures. The connectedness of teachers and students to the school and community is an important current issue in education and as such related literature will be reviewed in this chapter. The third issue that also threatens the future security of textiles education in NSW is the issue of teacher shortage. This issue includes the issues around keeping good teachers as well as attracting them to the profession. These issues will be the first to be addressed in this chapter.
Responding to the teacher shortage

Fritz (1998) reported a world wide shortage in the supply of teachers for the technology area. She saw one problem being that excellent qualifications in technology provide excellent job prospects for high remuneration in fields other than teaching. In a policy paper for the Australian Secondary Principals’ Association (ASPA) (1999) there was a report that data collected by ASPA in the previous five years indicated decreased teacher supply both in number and quality and it was found that in some areas there had been a critical shortage for over four years. The Research Standing Committee of the Home Economics Institute of Australia Inc. (2000) concluded that unless steps were taken to redress the situation of home economics teacher shortage by 2003 there would be an overall decrease in the supply and quality of home economics teachers (p. 35). Further, the study found that teachers are discouraged by, and in the main are critical of teacher preparation courses for home economics teachers (p. 35). The problem was exacerbated in NSW by the changes to curriculum and the combining of home economics departments with industrial arts departments to produce the new design and technology departments. In the amalgamation of the two departments many head teachers of home economics had lost their position (Cunningham, 1992). The community and family studies courses had to be realigned with Personal Development Health And Physical Education (PDHPE) meaning that there were less teaching hours required of the home economics teachers within the technology department. This situation created the condition in some schools where it was not seen as necessary to replace retired home economics teachers as the reduced teaching hours in the department no longer required the additional teacher (p. 37).

From my own experience at Australian Catholic University it is evident that very capable people with vast expertise in textiles education face many barriers to their entry into courses that would give them the qualifications to teach. Schacter (2003) made a similar observation and suggested alternatives to this situation (p. 109). He suggested that human capital is a valuable asset and the most should be made of the education that has been invested in people. Those who come into teaching with a rich and diverse background bring with them years of experience that cannot be underestimated. Yet research has shown that those who come to teaching with vast
experience as a first year teacher are not differentiated from other first year teachers who moved straight from high school to teacher training to teaching (Johnson, 2001; Tyack & Hansot, 1980).

In more recent years the shortage in Technology teachers, including those teaching in the area of home economics, has been addressed in NSW by Accelerated Teacher Training Programs (ATTP) and retraining programs undertaken with the assistance of the Department of Education and Training. Cornius-Randall (2004) outlined the opportunities that had been created by the Department of Education and Training from 2002 that had been delivered by Australian Catholic University, Charles Sturt University, Newcastle University, Southern Cross University, Sydney University and Wollongong University. Teachers who had a previous teaching degree in a subject area without a shortage were retrained as design and technology teachers. This retraining took place over an 18 month period and did not require the teachers to have any specific knowledge or skills in Design and Technology. The only requirement was that they have a teaching degree. Australian Catholic University only participated in the program in the first year it was offered, finding the situation untenable. The main specialisation the retraining catered for was in the area of engineering, computing and food technology. Sydney University offered a thirty-hour program in textiles skills provided by an outstanding high school teacher in high school facilities. The other universities did not include the development of textiles skills in the technology teacher training.

The ATTP was offered to applicants with a related previous degree (e.g., Computing, Architecture, Food Technology) and is structured for flexible delivery with a combination of online modules and intensive face-to-face modules. In 2002 retrenched workers from BHP were retrained at Newcastle University and Wollongong University as Design and Technology teachers (Cornius-Randall, 2004). It was not until 2006 that a need to fill the vacancies for Textiles and Design teachers in government schools was identified. This matter will be discussed further in Chapter 8. The current ATTP targeted people who had prior TAFE, industry and university training, industry skills and experience relating to one of the areas of technological and applied studies (NSW DET, 2005). After the completion of the 18 month course the graduates are expected to fill positions in Technology (mandatory) Stage 4 (Years
7 and 8), Design and Technology, Food Technology and the VET hospitality industry curriculum framework. The seven elements that the graduates are expected to meet are:

- Teachers know their subject/content and how to teach that content to students;
- Teachers know their students and how students learn;
- Teachers plan, assess and report for effective learning;
- Teachers communicate effectively with their students;
- Teachers create and maintain safe and challenging learning environments through the use of classroom management skills;
- Teachers continually improve their professional knowledge and practices; and
- Teachers are actively engaged members of their profession and the wider community (NSW Institute of Teachers, 2004).

Successful graduates from the ATTP are given positions in schools that have been difficult to fill. In a report on a special investigation into why the most inexperienced teachers are sent to the state’s toughest schools, McDougall and Bissett (2005) stated that a steady stream of disillusioned teachers are exiting the profession after only a few years. McDougall and Bissett (2005) reported that hundreds of beginner teachers have been put in charge of classrooms in the state’s most disadvantaged schools “fuelling the burnout rate that could be as high as 25 per cent” (p. 8). The article also reported that the most ‘rookies’ were placed in Southwest Sydney and Western Sydney. To inform the question of the sustainability of the current textile teacher pool, the textiles teachers in the study are asked their postcode, age, qualifications, number of years that they had been teaching and their intended years of teaching. The McDougall and Bissett (2005) report suggests that the students in the Southwest Sydney and Western Sydney areas are disadvantaged by the fact that there are more young teachers appointed in these areas. The current study hopes to identify the contribution that young teachers and people who are new to teaching make to schools and whether students in their care are actually disadvantaged.

The McDougall and Bissett (2005) report clearly shows that the young teachers who enjoy the challenge and have their focus on the students accept that teaching is a learning process, and requires hard work, but they find teaching rewarding when needy students ask for help and they can see the students achieve as a result of the
help given (p. 9). The article also reported that the Minister for Education stated that
the NSW Government is serious about supporting new teachers (p. 8). Further,
reporting on the experience of one of the sixty mentors assigned to support early
career teachers, McDougall and Bissett state that the teachers are not prepared for the
amount of work that is required to prepare effectively to manage a classroom, to get
the children to behave and to do their work. In textile teaching this is compounded by
the need to source materials and prepare for practical lessons that provide an
additional dangerous dimension with hot irons, sewing machines, and scissors.

Sikora and Alexander (2004) developed a model for professional development to
continue the development of new teachers in areas where teacher education programs
leave off, based on Birman et al’s (2000) identified six factors that can be posed in
question to form the context for successful planning and presentation (p. 48). The
intention was to support and retain the early career teachers. These factors include
form – study group, mentoring, individual action research project; duration;
participation – teachers with common background are likely to share resource
materials, course offerings and assessment requirements (p. 49); content focus eg
classroom management; active learning; coherence – supporting national, state and
district standards and assessments.

In form, the workshop was ongoing throughout the academic year and encouraged
sharing of concerns and the completion of individual growth activities in the form of
anonymously completed evaluation forms after each session. There were to be five
meetings a year for two years on Fridays and Saturdays. At the beginning of the
second year, new teachers were identified and joined the program. The participants
were from different schools, all Family and Consumer Sciences (FACS) teachers with
a common bond – they were new to the classroom or returning after several years of
absence from the teaching profession. As all participants were from the same
specialization the content focus provided multiple opportunities for strengthening
content knowledge, curriculum ideas and classroom management (p. 50). Active
learning was encouraged by assigning pre-meeting activities to be presented at the
meeting that included ten-lesson units using technology and planning for a new FACS
chapter as wrap-up activity for those completing their two years and introduction to
those commencing the program. Coherence was ensured by the specific nature of the
participants and reference to classroom implementation. The reporting on participant evaluations indicated that the new teachers enjoy the professional development program as much the second year, suggesting that the message soaks in a little more. After attending the New Teacher Workshops, participants were reported to take on leadership roles in regional professional associations. Problems that needed to be addressed concerned the ability of the participants to travel to the venue, necessitating smaller regional groups or alternative delivery methods such as distance learning (p. 51). This model appears to be very demanding. If the participation of the new teachers was on a Friday instead attending school it could strengthened their strategies in preparation for the new week. Spending a Saturday after a full-week of teaching would be less sustainable.

Kvaska and Lichty (2004) found that young teachers were leaving the profession because of the stress associated with teaching, the lack of administrative support and elimination of positions (p. 53). When asked what was required to keep the teachers in the profession the need for greater experience prior to the commencement of teaching was suggested. It was also found that the role of the university and cooperating teachers made a considerable impact on the perceptions and feelings of student teachers (p. 54). The greatest need was in the area of classroom management and discipline issues for the early career teacher. Kvaska and Lichty also found that the support given in the first year of teaching was the most significant in teacher retention rates. The feeling of pride and satisfaction was evident when early teachers received positive feedback from their mentor (p. 57). School events where the early career teachers could interact with their students and their parents were seen as valuable. The school fashion parade offered by the Home Economics / Technology Department is a great opportunity for young teachers to contribute and develop a closer rapport with the school students. Further, Kvarska and Lichty (2004) also found that positive feelings toward the teachers’ professional experience came when they had success reaching the students and the students completed the work set (p. 59). It would appear that if young teachers are given more guidance in designing appropriate activities that will motivate the students their early career experience will be more rewarding and they are more likely to stay in the profession. As a result of the literature findings ACU graduates were contacted for inclusion in this study. Their survey questions are
in Appendix D2. Consideration of this support for future graduates is outlined in Chapter 8.

**Retaining good teachers**

Voke (2003) suggested that the shortage of teachers is not a result of insufficient supply but rather of the number of teachers leaving teaching (p.4). The concern is that initiatives that seek to address the teacher shortage by increasing the supply of candidates only appears to increase the turnover, and therefore for initiatives to be effective they need to focus more on retention. The problem of out-of-field teaching was also expressed. As the history of textiles education indicates there was once an assumption that any female could teach sewing (Peacock, 1982). This assumption is less common today, with the knowledge of the skill loss and fewer opportunities to develop skills outside the school environment. The success of the attempt to retrain visual arts teachers to fill the shortage of textiles teachers will not be assessed by this study but their potential to support textiles education beyond 2012 will be discussed in Chapter 8.

Darling-Hammond (2000) found that teacher retention was greatly improved by effective induction programs (p. 22). The research found that the attrition rates of new teachers could be reduced by more than two-thirds. Knowledge of this finding motivated the teacher question in the extended response survey “What contribution would you like to make to textile and design teaching in your retirement?”(Appendix C1), the idea being that new teachers who may have problems with the teachers in their own school may appreciate having an experienced teacher who is neutral to the situation and who can offer support. The Institute of Teachers have planned for mentors for the New Scheme Teachers. The mentor teachers are full-time teachers who have their own responsibilities. The survey will not be a specific indication of the current teachers desire to support future teachers in this way but will determine a general desire to support the future of textiles education and be informed of new strategies that may be helpful.

Examining the different ways new teachers are inducted into schools around the world was the objective of Paine, Pimm, Britton, Raizen and Wilson (2003). Induction is not only a way to retain teachers, it is a way to consolidate their craft. Good induction
programs provide the environment for developing teaching skills that can only be developed through practice (p.69). The induction experience in New Zealand included the release from face-to-face teaching to observe other teachers taking the same courses, or for extra time to catch up on lesson plans and marking. Access to the Deputy Principal was provided to discuss time pressures and other concerns about life in the classroom and school (p. 67). In Bern, Switzerland, there is a provision of a group of four other teachers from different schools in Bern that meet for eight three hour sessions with a trained facilitator during their induction period (p. 68). In Shanghai, China, the beginning teacher is offered a mentor in the school, a planning group for lesson preparation, a research group for observation of others’ teaching and a district level new-teacher seminar group. In France there is a strong focus on developing the pedagogical content knowledge at the University Institute for the Formation of Teachers one day a week and teachers are examined on a yearlong research project (professional memoir) at the end of the first year. The new teachers work with a mentor in their own school and assist an experienced teacher in another school (p. 72). Looking at these international examples it is clear that induction programs vary greatly but they share very similar goals in achieving productive teacher learning. Preparing the teachers well increases their confidence. They are more likely to stay in the teaching service but more importantly they become better teachers for the students they will teach (p. 80).

Teachers who are not given responsibilities in the schools are more inclined to leave early in their careers and the encouragement of greater teacher autonomy in the classroom is associated with increased teacher commitment and retention (Grant and Murray, 1999; Voke, 2003). The involvement suggested by Voke (2003) included adopting polices that include teachers in school-based decision making. These findings inspired the analysis in this current study of the textiles teachers’ school environments in terms of their autonomy and commitment to the school. Saffold (2003) reported that teachers who are contemplating leaving the field of education have been given a renewed interest when given additional responsibilities in the school (p. 85). Veteran teachers have been found to experience a renewed commitment to the profession when asked to participate in a mentoring role (p. 86). This may well be a strategy that can be applied in areas of teacher shortage or areas where there is a high percentage of new teachers.
Teacher preparation

In addressing teacher preparation Pickard’s (2004) statement relating to family and consumer sciences teachers was informative as, anecdotally, this is the belief of current textiles teachers regarding future textiles teachers.

Only by preparing highly qualified [textiles] teachers, recognised for ability to reinforce academic skills while delivering [textiles] content, will the middle and secondary school survive and continue to provide important content and skills for life not taught in other subjects (p.12).

Pickard (2004) went on to say that high quality teachers not only know the content but are also capable of designing learning activities that engage the students. Her research found that only 35% of the recent graduates feel “very well prepared” to implement curriculum and less than 20% feel prepared to meet the needs of diverse students (p.14). Pickard (2004) advised the creation of a developmental portfolio in which all lesson plans, assessment and other teaching artefacts are filed. This has the effect of creating quality teaching resources that they will be assessed on. The assessment is drawn from the student’s reflection on the developed resources as a verbal presentation to the faculty in which the student is teaching (p. 17). The mentor and intern can then collaboratively develop the intern’s plan for professional development in preparation for the next assessment. When the assessment tool was piloted it was suggested that the performance evaluation be based on how the teachers pace their lessons and the positive working environment they create, as content knowledge is assessed with their university examinations.

The Showcase Portfolio resulting from the materials collected through internship illustrates for prospective employers the kinds of tasks these new graduates have experienced. In addition, folios are prepared to include all practical activities and group work completed during their teaching course. The value of this activity will be considered in the reporting of the student teacher’s teaching experience. LaBoskey (1997) spoke of using portfolios in teacher education in “teaching to teach with purpose and passion” (p.150). The importance of reflective practice in teacher education has been discussed more recently by Freedman, Bullock and Duque (2005) with predominantly white, middle class pre-service teachers. The intention was to explore and to express the pre-service teachers own feelings, beliefs, practices and biases in relation to issues of race, class, gender identity, sexual identity and ability (p.
It makes sense that if textiles education is going to fulfil a valuable role in education the pre-service teachers need to reflect on their own values and how these may affect their relationship with their students. How do pre-service teachers prepare for the development of tolerance and understanding? The opinion was expressed that the students must be provided with the space and thinking time to make sense of issues related to their future teaching practices and experiences, rather than be socialised to view education only in the way of the teacher educators (p. 598).

Freedman, Bullock & Duque (2005) also found that beginning teachers, insecure and lacking in confidence, are vulnerable, and so their first year of teaching experience is often an experience of “socialization to the status quo” (p. 601). It is important therefore that in teacher education the pre-service teachers develop a strength of conviction to teaching and the needs of their students. Collective conversations assist to “transform, to trouble, to interrogate our thinking and in turn to model for and support students through a similar process” (Freedman et al, 2005, p. 601). In addressing the difficulties experienced by student teachers Kvaska and Lichty (2004) found that support for the student teachers turned experiences perceived as overwhelming, frustrating and fearful into successful events and experiences that generated feelings of satisfaction, happiness, self-confidence and excitement (p. 53).

The research was designed to identify feelings student teachers perceived and the precipitating factors influencing the feelings; sources of feedback and support that the student teacher received, and strengths and weaknesses student teachers perceived regarding their level of preparation for teaching (p. 54). The data was gathered by electronic mail or by tape recording their response to open-ended questions. The transformation of perception centred around their attitude to the students as learners and as individuals, rather than as those with a collective behaviour of laziness or talkativeness (p. 57). This change of perspective produced a willingness for the student teachers to talk to the students from their classes outside the classroom, allowing them to get to know the students better. Several of the student teachers also noted feelings of pride and satisfaction when their mentors or cooperative teacher told them they were doing a good job. School events also provided an opportunity for student teachers to contribute, succeed and gain a sense of belonging (p. 58). These findings are reflected in the wording of the student teacher surveys used in this study.
Kvaska and Lichty (2004) recommended that stress management techniques be included in teacher training to assist student teachers with the overwhelming and stressful experience that most teachers encounter at the beginning of their teaching assignment (p. 65). The question regarding their textiles interests outside their studies was to deduce their tendency to use textiles craft as a means to relax or for stress management.

Stuart and Thurlow (2000) reported that as beginning teachers are insecure and lacking in confidence, they are vulnerable in their first years of teaching. Their conviction and commitment can be undermined by older teachers in the schools. They cited Renzaglia, Hutchens and Lee (1997), who suggested that novice teachers were more able to develop and maintain confidence if they have firmly established core beliefs and practices (p. 361) and are more likely to act as change agents in their classrooms and experience greater satisfaction in their roles as teachers. Based on the premise that change in beliefs follows rather than precedes change in behaviour (Guskey, 1986), the Stuart and Thurlow study (2000) had pre-service teachers recount their experience as teachers and many of them experienced the “I saw it with my own eyes” phenomenon that is existential and connected to one’s sense of self and thus confirmed their new beliefs. This finding ties back to the importance of the s.p.a.c.e learning conditions (Holliday, 1994). If the novice teachers find themselves in a school culture that limits their autonomy, they have limited opportunities to test theories of classroom management and are more at risk of being negatively influenced by teachers who have lost their enthusiasm for teaching.

**Sub-stage VII: New Steady State**

Once cultural transformation has been accomplished and the new cultural system has proved itself viable, and once the movement has resolved its issues of routinization, a new steady state will exist with a changed culture, different in pattern but acceptable. Steady-state processes of culture change continue; many of them are in areas where the movement has made further change likely. In particular, changes in the value structure of the culture may lay the basis for long-continuing changes. Thus in addition to the changes which the movement accomplishes during its active phase, it may control the direction of the resulting balance in the culture by shifting the values which define the cultural focus. This stage therefore can be seen as an opportunity to
further strengthen the stability of valuing textiles education until it is considered the opinion of the majority of textiles educators and others within the culture of schools and other institutions.

**Quality teaching and learning**

New teachers can also focus more on the students using the NSW model of pedagogy presented in the Quality teaching in New South Wales public schools: Discussion paper (NSW Department of Education and Training (DET), 2003). As this model is state-based there will be more authority to implement the model in the novice teacher’s classroom. There are three dimensions in the model and six elements for each dimension as indicated in the following table.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Intellectual quality</th>
<th>Quality learning environment</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Deep Knowledge</td>
<td>Explicit quality criteria</td>
<td>Background know’dge</td>
</tr>
<tr>
<td></td>
<td>Deep Understanding</td>
<td>Engagement</td>
<td>Cultural knowledge</td>
</tr>
<tr>
<td></td>
<td>Problematic Knowledge</td>
<td>High Expectations</td>
<td>Knowledge integration</td>
</tr>
<tr>
<td></td>
<td>Higher-order thinking</td>
<td>Social support</td>
<td>Inclusivity</td>
</tr>
<tr>
<td></td>
<td>Metalanguage</td>
<td>Students’ self-regulation</td>
<td>Connectedness</td>
</tr>
<tr>
<td></td>
<td>Substantive commun’cation</td>
<td>Student direction</td>
<td>narrative</td>
</tr>
</tbody>
</table>

Table 5 The dimensions and elements of the NSW Model of Pedagogy (NSW DET, 2003)

The NSW Model of Pedagogy (Department of Education and Training, 2003) outlines the three dimensions that represent classroom practices that have been linked to improved student outcomes. A copy of the document can be found in Appendix F. These dimensions are used to assess the value of the pedagogy used in the textiles curriculum in NSW secondary schools. For each of the dimensions there are six elements that are matched to the responses of Head Teachers, textiles teachers and students on the question of the value of textiles education in secondary schools in Chapter 8. The three dimensions are *intellectual quality, quality learning environment* and *significance*. Intellectual quality refers to pedagogy focused on producing deep understanding of important, substantive concepts, skills and ideas. Pedagogy that establishes a high *quality learning environment* refers to pedagogy that creates classrooms where students and teachers work productively in an environment clearly focused on learning. Such pedagogy sets high explicit expectations and develops
positive relationships between teachers and students and among students. Pedagogy that generates *significance* refers to pedagogy that helps make learning more meaningful and important to students. Such pedagogy draws clear connections with students’ prior knowledge and identities, with contexts outside of the classroom, and with multiple ways of knowing or cultural perspectives.

In his impressions on how collaboration assists quality learning, Marshall (2001a) suggested indicators of quality work. Quality learning is that in which people choose to be engaged; it is meaningful to them; it involves some creativity and skill and involves more than a simple task; it is usually complex. The activity requires personal control and results in some success. Self-assessment is involved and engagement in the task is not perceived as coercive. Often times, the activity is not seen as stressful; it may even feel relaxing (p. 5). This description of quality work could well be a definition of a textiles craft activity and as such contributes to the perceived value of textiles education. Marshall (2001a) went on to suggest how discussion around the topic of quality could be raised with the students so that they could examine their own objectives, and this strategy is reported to increase motivation. Such discussion is said to persuade students that the content of the course is worth their time and effort. The focus is on collaboration not competition. Quality learning involves student interaction for maximum participation (p. 9).

Illeris (2005) suggested that quality learning relied on two processes, namely an external interaction process between the learner and his or her social, cultural or material environment, and an internal psychological process of acquisition and elaboration (p.89).

In his paper, Illeris explains that many learning theories only deal with a focus on the internal psychological process or the external interaction. Zhang and Sternberg (2005) state that learners have a preference for each process and described them as scopes for mental self-government. With a preference for internal psychological process, the learner enjoys being involved in tasks that adhere to existing rules and tasks that allow one to work independently. In contrast, an individual who prefers the external style or external interaction process enjoy engaging in tasks that provide opportunities for developing interpersonal relationships and tasks that involve novelty and ambiguity (p.69). The preference for a particular learning process can serve one person
positively in one situation and may fail the same person in another situation (Zhang & Sternberg, 2005; Illeris, 2005). The quality of teaching and learning, therefore, would be enhanced by a knowledge of the learner and their preference for the internal psychological learning process or the external interaction process. To enhance the quality of learning it would be beneficial to find ways to develop affinity for the alternative learning process for which students do not have a natural preference for. Textiles education provides many opportunities for both learning processes. Comments from students allude to these preferences, and suggestions as to how quality learning can engage the students will be found in Chapter 8 in considering the value of textiles education to quality learning. It is clear that the NSW Model for Pedagogy (Department of Education and Training, 2003), in identifying the need for the three dimensions of intellectual quality, quality learning environment and significance to be included in quality teaching, addresses both learning processes and preferred styles reflected in more current international literature.

Lovat (2006) stated that Quality Teaching is not complete without values education (p. 28), and so the next section will discuss this link.

**Quality teaching and values education**

Recent research indicates a link between teacher quality and the nature of the learning environment. Rowe’s (2004) study indicated that of all the qualities of teachers that high achieving students appreciate, the ability to provide a caring and trustworthy environment was of greatest importance. The National Framework for Values Education was developed out of the Values Education research (2003) and extensive consultancy. It is based on the National Goals of Schooling for the Twenty-First Century (DEST, 1999). The National goals recognise that

Australia’s future depends upon each citizen having the necessary knowledge, understanding, skills and values for a productive and rewarding life in an educated, just and open society. High quality schooling is central to achieving this vision…. Schooling provides a foundation for young Australians’ intellectual, physical, social, moral, spiritual and aesthetic development (Preamble).

Textiles education has an important role in the schools in encouraging this development. The Australian government’s focus on the development of values in secondary education strengthens the relevance of this study of the value of textiles
education. The National Framework for Values Education (2005) indicated that from 2004, the Australian Government is providing funding of $29.7million over four years to help make values education a core part of Australian schooling through support for:

- school values education forums in every school in Australia;
- drug education forums in every school;
- clusters of schools showcasing good practice approaches in line with the National Framework for Values Education in Australian Schools;
- curriculum and assessment resources for all schools to promote values education;
- national partnership projects with parents, teachers, principals and teacher educators (p. 7).

An interesting perspective expressed by Marshall (2001b) shows great sensitivity to the needs of a student. He states that students who have not yet learned a task will be discouraged if their efforts are criticised. It is a difficult task to teach important skills without insisting that they be executed correctly the first time. Further, Marshall believes that “The awareness of the negative effects of criticism and the positive effects of empowerment may be one of the most distinguishing marks of superior teachers and parents” (p. 2). His belief that an orientation toward participation should hold a higher priority than perfection. In the HSC Textiles and Design Syllabus there is a section that explores the quality and value of textiles. It provides a good opportunity for teachers to focus on raising the standard of manufacturing techniques and yet appreciate the value of human expression in textiles. This concept of positive expression versus a focus on the development of quality products will be explored in the analysis of responses to teacher and students surveys in Chapter 7 and further in recommendations for teacher development in Chapter 8.

Values in education

Pascoe (2002) presented a valid argument for focussing on values in education when suggesting that education determines the nature of the individual, and this needs to be carefully planned, ‘not left to chance’. Gutman (1987) described the process involved in the preparation of young people for their lives as citizens by educators and parents as ‘conscious social reproduction.’ In the Australian context, conscious social reproduction occurs within a framework of the Adelaide Declaration on National Goals for Schooling in the Twenty-first Century (MCEETYA, 1999). The goals were endorsed by the State, Territory and Commonwealth Ministers of Education in April
1999, a decade after the original goals were launched in Hobart. In NSW The New Higher School Certificate Program of study syllabuses (Board of Studies, 1999) clearly displayed the influence of these goals in the wording of the Purpose of the Higher School Certificate (HSC), that appears in every HSC syllabus.

The purpose of the Higher School Certificate program of study is to:

- provide a curriculum structure which encourages students to complete secondary education;
- foster the intellectual, social and moral development of students, in particular developing their:
  - knowledge, skills, understanding and attitudes in the fields of study they choose
  - capacity to manage their own learning
  - desire to continue learning in formal and informal settings after school
  - capacity to work collaboratively
  - respect for the cultural diversity of Australian society;
- provide a flexible structure within which students can prepare for:
  - further education and training
  - employment
  - full and active participation as citizens;
- provide formal assessment and certification of students’ achievements
- provide a context within which schools also have the opportunity to foster students’ physical and spiritual development. (Board of Studies NSW, 1999)

Textiles and Design is well positioned to address the purposes raised as the findings show in Chapter 7.

*The Values of NSW Public Schools* (DET, 2001) were distributed for discussion among teachers, students, parents, carers and school communities. Some of the challenges addressed in the Values Education Study (2003) included improving whole school cultures, developing school mission statements incorporating a set of values, including values in key learning area programs, increasing student engagement, belonging and connectedness to schooling, fostering student empowerment and encouraging youth civic participation, improving student and staff health and wellbeing, promoting improved relationships, tackling violence, anti-social and behaviour management issues, and building student resilience as an antidote to youth...
suicide and substance abuse. Textiles education, with its potential to link many key learning areas with cultural and project based themes, may be found to be a central focus on which to build the values education in schools and examples of this contribution are expected to surface through the textile teacher interviews. The Values Education Study (DEST, 2005) noted ways in which values education could support related initiatives such as the National Safe Schools Framework, the National School Drug Education Strategy and the Mind Matters program promoting mental health in schools. As textiles education has been proven to be valuable to the management of depression and stress in adults (Benson, 1975; Bazeley, 1980 & Lane, 2005b) its role in assisting with the promotion of mental health in schools may be an avenue that has not been considered previously.

2.9 Chapter summary and conclusion

The analysis of the valuing of textiles education in secondary schools through the theoretical perspective of revitalization movements can start to explain why textiles is seen to be growing in some schools and is still considered to be of no interest in others. Revitalization movements are not linear, and as the description of the stages and historical events that relate to them indicate, it is a dynamic of overlapping concepts that have been separated out for the sake of exploration. This analysis aims to show that there are multiple stages of revitalization being experienced throughout the state of NSW. The historical events may indicate that there have indeed been waves of revitalization occurring in a cyclical motion since colonisation. The reality of the revitalization movements steady state will be experienced beyond 2010. Though this link will only be proposed in this study it will be an exploration for future research.

This chapter outlines the literature and documents relevant to support the notion of the revitalisation of textiles education in NSW. I have argued that textiles education is at the adaptation stage of revitalization historically and the survey details will either confirm or deny this conclusion. As the cultural transformation stage approaches it is necessary to be informed of the needed support and nature of the required cultural transformation. Evidence of the cultural transformation stage is gathered from the teacher surveys and interviews. The literature review in the stages of routinization and the new steady state provides a means of supporting the growth of textiles that is
sustainable. Unlike the collapses in the valuing of textiles education that are evidenced by historical recall. Anticipation of the downward trend can be prepared for and prevented. The literature and documents relevant to the sustainability of textiles education in secondary schools in NSW particularly focused on the nature of the teacher and overcoming teacher shortages. This literature informs the preparation of effective textiles and design teachers for the future.

Reviewing the literature on the current issues related to the development of good teachers and their retention in the teaching profession provided several direction indicators for this study. It became increasingly important that the early career teachers be supported by the university within the first year of teaching and that strategies need to be developed to present a caring environment in which students can experience trust and become engaged in their learning. If the new teachers are not confident with their content they need to have access to resources to strengthen their knowledge and strategies to motivate the students and allow the teachers to learn with the students. Activities provided by the school to offer them responsibilities and opportunities to interact with the students and parents, and to understand the cultural influences within the school, should assist in the retention rates of these new scheme teachers. Teacher and student communication also provides an opportunity to understand the capabilities of students and the contribution the families can make in the development of knowledge and skills in the classroom. As a result of the literature review questions relating to family contributions to the development of textiles skills were included in the textile teacher and student teacher survey. There was also a perceived need to identify teachers who could provide a mentoring role to new teachers.

In Chapter 3 I describe the method used to collect data related to the factors that shape the valuing of textiles education in secondary schools and to determine the support necessary for its successful revitalization beyond 2010.
CHAPTER 3
METHODOLOGY

3.1 Introduction
A central aim of this study is to gain an accurate description of the participants in, and their perceptions of, textiles education in secondary schools in New South Wales (NSW). From these perceptions of textiles education, the intension was to gain insights into the possible factors that influence the valuing of textiles education and how that valuing can be enhanced in the future. There was no attempt to define or clarify the meaning of the value of textiles to the participants, preferring instead to elicit more nuanced responses beyond the researchers anticipated responses. The researcher anticipated that participants may address three separate aspects of the value of textiles, these included 1) the benefit of the study of textiles to the students in skill development and the development of self esteem and relaxation, 2) the benefit of offering the study of textiles within the school to support extra curricula activities such as musical performances and displays, and 3) the status of the study of textiles in relation to other subjects in the school. By not defining these three areas the responses were anticipated to reflect more spontaneous perspectives rather than guided responses.

This study is conducted with a mixed method approach in three main phases.
In preparation for the study, data was obtained from The NSW Board of Secondary studies (BOS) on enrolments in the preliminary and Higher School Certificate (HSC) Textiles and Design Course. The data provided the details of schools offering the course and the change in enrolment numbers from 1999 to 2003. The first phase of the study collected descriptive quantitative data and data related to the secondary textiles education experience, through a mail questionnaire sent to the teachers and students actively involved in textiles and design programs in NSW secondary schools. The schools surveyed were those identified by the BOS data as offering the Textiles and Design course. The vision of textiles education in secondary schools in NSW is further enhanced by the gathering of data from head teachers of technology on the number of classes offering textiles education and the number of students in those classes, to support the thesis that textiles education is experiencing revitalisation. An open question was directed to all participants on their perceptions of the value of textiles in secondary schools. As part of the consent process, teachers were given the
opportunity (in the first phase of the study) to volunteer to complete an extended response questionnaire and participate in an interview organised at their own convenience during the second phase of the study.

The second phase provided an opportunity to inform the findings from the first phase and guide the study toward recommendations for future textile teacher training. The third phase questioned student teachers enrolled in the Bachelor of Teaching/Bachelor of Arts –Technology, Australian Catholic University on their preparedness to teach textiles in secondary schools and their perceptions of the support for textiles education in the secondary schools in which they had completed practice teaching.

This research also draws upon personal experience as a member of curriculum committees over a period of 10 years and in particular the consultative committee for the new HSC Textiles and Design (T&D) syllabus, the writing committee for the same syllabus, and (once the syllabus had been introduced), the examination committee. My personal experience has led to the recognition that while a group of individuals may be charged with responsibility of developing a new curriculum, the teachers who present the curriculum to the students have to believe in its value if the benefits of textiles education are to be realized in schools.

The aims of the study were

- To identify the value of textiles education in secondary schools in NSW
- To determine the extent to which teacher training has affected or will affect on the teaching of textiles courses post 2010
- To develop strategies to support the growth of textiles education in NSW secondary schools

### 3.2 The research design

The research design for the project is set out in Table 1, 2 and 3. The tables outline what I investigated, why and how I gathered the information in the three phases of the study. Table 1 outlines phase 1 school survey data collection. Phase two data were collected from teachers’ extended response questionnaires and interviews, outlined in Table 2. Phase three data were accessed from the student teachers’ survey and is outlined in Table 3.
<table>
<thead>
<tr>
<th>What to Investigate</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1 – Head Teachers, Textiles Teachers and Textiles Students</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The characteristics of teachers age, gender, years of service, education, years to retirement</td>
<td>To provide an image of the quality of the teachers and how much longer they intend teaching</td>
<td>Using Board of Studies data, survey schools in NSW that offer HSC Textiles and Design</td>
</tr>
<tr>
<td>Textiles Experiences of Textiles Teachers</td>
<td>To identify the extent of their interest in textiles, professional development, and their expertise</td>
<td>Open ended questions on the original survey on textiles experiences with family, with friends and professional associations</td>
</tr>
<tr>
<td>Head Teachers background and teaching subjects</td>
<td>To test the hypothesis that textiles elective classes are more often offered in schools with Head Teachers of Home Economics Background who teach textiles</td>
<td>Head Teacher survey distributed to all NSW secondary schools offering HSC Textiles and Design</td>
</tr>
<tr>
<td>Numbers of textiles teachers on technology staff and number of elective textiles classes</td>
<td>To identify the strength of textiles education in different schools and areas and to determine relevance to the strength of T&amp;D in the school</td>
<td>Table for completion on Head Teacher Survey</td>
</tr>
<tr>
<td>Textiles Experiences of Textiles students both at school and outside school</td>
<td>To test the null hypothesis that students’ valuation of textiles in school is not enhanced by textiles experiences outside school</td>
<td>Open ended questions referring to textiles experiences in yrs 7&amp;8, 9&amp;10, with family, with friends and with instructors</td>
</tr>
<tr>
<td>The degree of interest of secondary textiles students in becoming textiles teachers</td>
<td>To gauge level of future enrolment in textile teacher training. Obtain characteristic profile of students who may be interested in teaching textiles</td>
<td>Question to identify their preference for a career in teaching textiles. Postcode identifies the location of the potential teachers in their regions.</td>
</tr>
<tr>
<td>The Head Teachers, textile teachers and textile students’ perception of the value of textiles in secondary schools</td>
<td>To ascertain whether perceptions of the value of textiles education are held by all involved in it.</td>
<td>Include the open ended question on the surveys for Head Teachers, textile teachers and textile students.</td>
</tr>
</tbody>
</table>
### Table 2 Phase two data collection

<table>
<thead>
<tr>
<th>What to Investigate</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 2 - Textiles Teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The attraction to teaching textiles</td>
<td>To gather ideas on how to attract teachers to teach textiles</td>
<td>Extended response questionnaire to consenting textiles teachers, clarified by teacher interviews with both experienced and inexperienced textile teachers</td>
</tr>
<tr>
<td>Contributions to the teaching of textiles</td>
<td>To gather ideas on how best to support textiles teachers in the future</td>
<td></td>
</tr>
<tr>
<td>Contribution teachers have made to other teachers, school and community</td>
<td>To identify the value of textiles education beyond the classroom</td>
<td></td>
</tr>
<tr>
<td>Teachers perceptions of the ideal textiles teacher, their characteristics and skills</td>
<td>To identify the characteristics and skills that we need to be developing in teacher training.</td>
<td>Extended response questionnaire to consenting textiles teachers.</td>
</tr>
<tr>
<td>The contribution teachers plan to make in retirement</td>
<td>To determine whether there are experienced teachers who would be prepared, in retirement, to mentor inexperienced teachers</td>
<td></td>
</tr>
</tbody>
</table>

### Table 3 Phase 3 data collection

<table>
<thead>
<tr>
<th>What to Investigate</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 3 - Design and Technology Student Teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attraction to teaching textiles</td>
<td>To gauge level of interest in teaching textiles after completion of qualifications</td>
<td>Questionnaire to consenting student teachers majoring in food and textiles at The Australian Catholic University and Whitehouse School of Fashion</td>
</tr>
<tr>
<td>What future teachers have to contribute to school communities as textiles teachers</td>
<td>To identify if the students are aware of the value of textiles to a school community without leading their response</td>
<td></td>
</tr>
<tr>
<td>Students perceptions of what characteristic and skills contribute to the ideal Yr 7-10 textiles teacher and effective HSC textiles and design teacher</td>
<td>To identify if student teachers perceptions are in keeping with teachers perceptions</td>
<td></td>
</tr>
<tr>
<td>Perceived strength of textile facilities in technology departments in schools</td>
<td>Gauge changing interests in textiles in secondary schools</td>
<td></td>
</tr>
<tr>
<td>The content details and enrolments in courses offering qualifications to teach textiles and design in secondary schools</td>
<td>To assess the number of students currently in training programs and the nature of their training</td>
<td>Review courses offered in University Admissions Centre Guide Obtain details of course structure from university websites Obtain enrolment numbers from The Department of Education, Science and Training.</td>
</tr>
</tbody>
</table>
3.2.1 Justification of the methodology

As a researcher I have constructed a framework for the study based on respect for teachers’ demands of their context. The context includes the educational environment and the needs of student populations. A mixed method is well suited to the research study because it provides recognised methods of accessing relational data with minimal interruption to teachers or students and provides data rich in detail. Though subjective in nature, such data is able to be explored and analysed systematically to discern the emerging overall patterns that are not visible to individual participants in the study.

In phase 1 both quantitative and qualitative data were collected. An objectivist epistemology and survey methodology were used for the collection and reading of objective data on teacher and student demographics. The methodical rules of scientific research minimise the likelihood of error. In abiding by the discerning methodical rules of research, we gain confidence that our findings are accurate or error free (Ruane, 2005, p. 11). There was an attempt to survey every school that offers Textiles and Design in Stage 6 of secondary schools. Martin Denscombe (2003) states that surveys usually relate to the present state of affairs and involve an attempt to provide a snap shot of how things are at a specific time over a wide number of cases in a quest for tangible information that can be quantified (p. 6). The advantages of self responding written surveys are that they are purposeful and structured and tend to concentrate more on data than theory. This is important as not to bias the respondents for stage two of the study – the extended response and interview phase. The self responding written survey is also an effective and inexpensive way to cover the breadth of representatives over a large geographical area (Denscombe, 2003, p. 7). Although the main methodology follows qualitative methods, the survey data is quantifiable for nominal data.

According to Denscombe (2003) there are three disadvantages of using a postal survey. First there is a danger that the “data are left to speak for themselves”; second, that the data produced are likely to lack detail or depth on the topic investigated; third, that there is a limit to the degree to which the researcher can check the accuracy of the responses (p. 28). These disadvantages will be overcome by the mixed method approach that will follow up the survey data collections with a second qualitative
survey and interview. The research design does not allow for clarification of the student responses as it was not seen as feasible to include student interviews. Consideration of the breadth of the sampling across all the schools in the state offering Textiles and Design at Stage 6 will provide a valid and representative response.

The alternatives were to survey teachers at a textiles teachers’ conference, as has been the method used in past Home Economics research, or to use a telephone survey. Textiles teachers could be surveyed at a conference, but, this method would not gain access to the students and Head Teachers who might give a more complete vision of the culture of textiles education in the schools. Telephone surveys may be more effective in obtaining a response from Head Teachers, but could not be completed as anonymous responses. The issue of respondent honesty is more difficult to assess or control if the response is not anonymous, as humans are more likely to respond in a way that is acceptable to the researcher or that presents the respondent in best light with the possibility of introducing “social desirability bias” (Ruane, 2005, p. 124).

With the risk of a small response rate it was imperative that the quality of the response was secured. The three questionnaires used in the school are found in the Appendix B, as is the covering letter to the Principal, and the consent letters. The quality of response to the questionnaire was checked by piloting the questionnaire and resolving any ambiguities. More details of this process will be found in this chapter under Instruments and procedures to collect data. The questionnaire included questions related to demographics as well as more open-ended questions that were more qualitative in nature. The themes that arose out of the teachers’ open-ended question responses in the initial survey were followed up in the extended response surveys and interviews of teachers who volunteered to participate in phase two of the research. Details of these surveys and the interview questions are found in Appendix B.

The mail survey was not delivered until after obtaining ethics approval. Obtaining permission from all the Catholic Dioceses resulted in only one not willing to take part. In the process of approval from all school systems there was an insistence on the Principal being the first point of contact and approval in the schools before any surveys could be distributed. This stage in effect diminished the sample. A follow-up
fax reminding the Principals of the invitation to participate resulted in a larger number of respondents, as explained later in the chapter under Unit of Analysis.

The phase one survey provides some quantitative data on which to base the overall analysis of the qualitative findings of the study and provides valid attributes for the intersection matrix analysis in NUDIST*Vivo (N*Vivo). Details of this software and its use in analysis will be found later in the chapter under Procedures.

Using the theoretical frameworks of The NSW model of Pedagogy presented by the discussion paper, Quality Teaching in NSW Public Schools, I view the data from all respondents through a more critical analysis according to the three dimensions of quality teaching and eighteen elements to substantiate the claim of the value of textile education in secondary school. Details of this model will be found in section 3.9.

Through the Framework of Douglas’ (1982) Grid and Group, responses from the teachers are viewed in a cultural context. As Douglas comes from a science method background of anthropology, her framework is critical yet allows for the examination of consciousness using qualitative data to eliminate the separation of the knower from the known (Husserl, 1931). The theory of grid and group has been applied and adapted by many researchers (Spickard, 1989; Thompson, Ellis & Wildavsky, 1990, Coakley, 1992; Rayner, 1984; Lim, 1995) and in her introduction to the 1996 edition of her book Natural Symbols, Douglas states, “there have been great developments [in the theory grid and group(1982)]. The only thing that matters is the collaborative effort to think about life and human values with a tool that systematically questions the thinkers own starting point” (p. xxviii)

Douglas’ theory (1982) was used by Edward Harris in researching the evolving field of educational administration (2006, p. 147). He found the theory helped to bring order to experience and provided a common language to explain behaviours and interactions in a school setting (Harris, 2006, p. 131). As Harris found, the grid dimension refers to the degree to which an individual’s choices are constrained within a social system that dictates role expectations, rules and procedures. The grid can be plotted on a continuum from strong to weak. At the strong end of the grid continuum, roles and rules dominate the environment and restrain individual autonomy (Harris, 2006, p. 132). In his study hierarchy had an imposing impact on the individual and it was informing a vision of teachers for my own study. In an environment where the
head teachers make all the decisions, teachers have little freedom to select their own methods of teaching and resources or even choice of classes in which to teach. The Principal of the school may also impose controls over what electives are offered.

Husserl, considered the father of the phenomenological approach, focused on the need for the researcher to suspend judgement and “bracket” preconceptions – to put them aside deliberately – while taking note of our conscious act of knowing (Crotty, p. 79). Husserl’s position shows an interest in the process by which we come to know things consciously, rather than our consciousness of things. This is important in the context of attributing value to anything. A value is a judgement and can be quite subjective, yet viewed in context of culture and environment it is possible to be more objective in assessment of the value of textiles education in secondary schools. As Wallace (1966) states

It is one of the conspicuous features of modern science that major advances in substantive knowledge depend upon major advances in the self-awareness of the scientist. Only as the scientist comes to recognise and to take account of the limitations imposed on his vision by the concepts he chooses to consider important,…can he achieve the flexibility of approach required to solve new problems (p. 2).

George Herbert Mead (1934), a philosopher and social psychologist, thought that every person is a social construction. It is from the thought of Mead that symbolic interactionism was born (Crotty, 1998, p. 62). Crotty (1998) also states “constructionism is not subjectivism. It is curiosity not conceit” (p. 52). “Our culture brings things into view for us and endows them with meaning and, by the same token, leads us to ignore other things” (Crotty, 1998, p. 54). The differing opinions of teachers and students regarding the value of textiles has been influenced by their previous experience and therefore affects how they value textiles. The value that teachers attribute to textiles education is influenced by the culture of the school in which they operate. If they are not conscious of this influence they mistake vision for reality. My philosophy of learning follows that of Peter Jarvis (2005) with his existentialist perspective of learning. He sees learning as

the combination of processes whereby the whole person – body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs and senses) – is in a social situation and constructs an
experience which is then transformed cognitively, emotionally and practically (or through any combination) and integrated into the individual’s own biography (p. 7).

Jarvis’ (2005) theory was developed from that of Kolb (1984), who defined learning as “the process whereby knowledge is created through the transformation of experience” (p. 41). As the study of textiles provides a strong practical experience that draws on experiences related to the family and cultural contexts and has the potential to become a valuable part of the students’ future lives, I see the study of textiles as satisfying needs of the whole person. Further, Crotty (1998) posits that we need to recognise that different people may well inhabit quite different worlds. Their different worlds constitute for them diverse ways of knowing (p. 81).

As I am examining the cultural constructs of reality for the teacher and student in the school environment, the epistemology that I am working through for the qualitative component of the study is constructionism, and the theoretical framework symbolic interactionism. For the perceptions of the value of textiles this epistemology alerts us to the fact that a person’s reality is influenced by their environment. As a participant in the culture I am studying, recognising the understandings that have developed (Crotty, 1998, p. 80) through my interaction with textiles education over more than 40 years from the experience (with my mother at home to primary school, secondary school, teacher education and then as a teacher myself), has the potential to bias my observation. Patton (1990) sees the competing paradigms of positivism and phenomenology as constructs into which researchers are socialised. This process of socialisation produces norms and embedded assumptions about the best way to carry out research (p. 37).

In choosing the most appropriate research methodology, I was guided by my goal of working within a framework congruent with the field of study, education, and teaching practice. Patton (1990) states that the methodological framework is important to give direction to the study (p. 36). Such a framework depicts the logical links amongst the most important elements of the topic and embodies relevant, existing theories and philosophies. Flaws described by researchers experienced in qualitative methodologies include the labour intensiveness of data collection and analysis, researcher bias, inadequate sampling procedures and the utility,
generalisability and credibility of conclusions (Miles & Huberman 1994, p. 1). While these flaws are reduced through the use of computer software, Richards (1997) warns against falling into the trap of losing important aspects of qualitative methods, such as the focus on unique experience and rich data, in order to gain scientific status (1991, p. 41).

Rossman and Wilson (1984, 1991) suggest broad reasons for linking qualitative and quantitative data. Using both forms of data provides richness in analysis and it initiates new lines of thinking through attention to surprises or paradoxes, “turning ideas around” and providing fresh insight (Miles & Huberman, 1994, p. 41). Tashakkori et al (2003) state that mixed methods data analyses offer a more comprehensive means of legitimating findings than do either qualitative or quantitative data alone, by allowing analysts to assess information from both data types (p. 64). Given the advantages of a mixed method approach and the variety of data to be discussed, the mixed method approach has been used in this study.

Using enrolment data from the NSW Board of Studies for HSC Textiles and Design in secondary schools, survey data, follow up interviews and university enrolment data for design and technology teacher training, offers an opportunity to reflect on the phenomenon of the value of textiles education from the descriptions and explanations of all concerned in its instruction in secondary schools. Head teachers, textile teachers secondary students and student teachers all experience the phenomenon from different perspectives. Every perspective assists in the identification and analysis of embedded assumptions about the practice of teaching textiles. The second textiles teacher survey, seen in Appendix C1, was generated from data collected from the head teacher, textiles teacher and student surveys. The interview questions were designed to enrich the data, and to confirm and consolidate the development of theories arising from previous data.

As Denscombe (2003) suggests, interviews involve a set of assumptions and understandings about the situation which are normally associated with a casual conversation (p. 163). When deciding on the appropriateness of an interview there were two questions offered by Denscombe. “Does the research really require the kind of detailed information that interviews supply?” and “Is it reasonable to rely on
information gathered from a small number of informants?” As Patton (2002) suggests, justification for interview lies in the necessity to clarify previous survey data in a relaxed natural atmosphere that will enrich previously gathered data and get a sense of the experience and teacher feelings about teaching textiles and design in secondary schools (p. 343).

When participants consented to take part, it was in the full knowledge that their comments would be recorded and used as research data for the completion of the project specified. Gillham (2000), in his discussion on the interviewer as the research instrument, suggested that interviewers should keep their dialogue to a minimum and to encourage the respondent with subtle active listening. It was advised that the interviewer sit at a ninety degree angle from the respondent to prevent dominating eye contact. This relaxed positioning was achieved by sharing the microphone and sitting at adjacent sides of a table, as opposed to opposite sides of a desk. The interviewers conversation, facial expression, eye contact, head nods and gesturing were kept to a minimum, and “…through the clarity of that economy they (good interviewers) are able to steer interviewees to reveal what they know that is relevant to the focus of the interview” (p. 28).

In analysis the interview data was used with the second-phase survey questions in order to corroborate facts. For this reason the interview was semi-structured. Questions used are found in the Appendix C2. There were several questions to be addressed but there was some flexibility on the order the topics were put to the respondent for maximum relevance and flow of the interview. This flexibility allows the interviewee to develop ideas and speak more widely on issues raised by the researcher and to spend more time elaborating on points of interest (Denscombe, 2003).

The purists criticize mixed method research on the basis that it is neither sensible nor possible. They argue that the attributes of a paradigm form a “synergistic set” that cannot be meaningfully segmented or divided up to allow for a problem to be examined from different perspectives (Guba & Lincoln, 1984; Smith & Heshusius, 1986). By contrast, the pragmatic view, that paradigm attributes are logically independent and therefore can be mixed and matched in conjunction with method
choices allows for inquirer flexibility and adaptiveness to solve a problem (Reichardt & Cook, 1979). As Miles and Huberman (1984) comment, epistemological purity does not get research done.

The use of computer software increases the rigour of organising, interpreting and retrieving interview data. Some aspects of the data gathered in this study are quantifiable, and are presented in tables, but the data produced in studying the value of textiles and teaching practice are predominantly qualitative. The demographics of the participants were also used for document attributes in the qualitative analysis software.

3.3 Ethical Considerations
I completed the questionnaires developed by the Ethics Committees for RMIT University, The Department of Education and Training and the Australian Catholic University. I also made application by completing questionnaires for the nine individual Catholic Dioceses included in the study. The applications demonstrated my awareness of ethical issues relevant to the research, and showed that I had developed an appropriate information sheet and consent forms relevant to each participating group. The use of an information sheet and consent form ensured that applicants were informed about the purpose of the research, their rights as participants and my responsibilities as the researcher.

There have been many ethical issues to think through and address in this study. For example, the sampling procedures may attract questions regarding ethical issues pertaining to voluntary participation in research. In the sampling process, the Principals of the schools determined which teachers and students would participate, because the Principals were required to give their consent before the study could begin in their schools. Some Principals might have applied pressure to reduce the voluntary nature of participation. Others did not give their consent, and so prevented the participation of teachers who may have volunteered, given the opportunity. Another possibility is that the Principal consulted the technology Head Teachers before consenting, and if the Head Teachers had an Industrial Arts background, they may not have shown as much interest in the study as Head Teachers with a Textiles or Home Economics background. The agreement of Principals was a requirement set by
the Department of Education and Catholic Education Ethics Committee as a condition of approval and was therefore beyond the researcher’s control. There was no coercion and there were no promises of benefits to the participants. The researcher also had no control over the amount of pressure applied by teachers to obtain a ‘voluntary’ response from students.

It was noted in the ethics approval that no teacher would be identified with the comments given, yet some teachers made a point of stating that they were happy to be quoted by name. As the systems ethics applications did not allow this level of disclosure, all teachers’ interviews were coded with relevant data on age, gender, education, school type, and area only.

The Australian Catholic University student teachers were invited to an information meeting on the research. It was offered outside their lecture time and did not coincide with assessment of any unit that I was conducting with the students at the time. A letter and survey kit was sent to Leanne Whitehouse, Director of The Whitehouse Institute, requesting participation of her third year student teachers, and she gave the information sheets, consent forms and surveys to one of the lecturing staff for the group for completion by the students. There were no student teacher respondents from The Southern Cross University or University of Newcastle. As these universities are major contributors to the pool of teachers available to teach textiles in NSW their program information was obtained online and enrolment details from the Department of Education, Science and Training were considered for the assessment of available teachers beyond 2012.

The final ethical issue is in the nature of my contribution to the development of the current HSC Textiles and Design Syllabus. My interpretation of data collected will inevitably be viewed with the bias of one passionate about the contribution textiles education makes to the lives of students in secondary schools. As an academic seeking truth, awareness of this bias is tempered by the desire to present as rigorous a study as is possible.
3.4 Units of Analysis
The NSW Board of Studies holds data on enrolment numbers from each school. The sample was drawn from the 154 NSW schools that offered HSC Textiles and Design in the 2003 Higher School Certificate. These schools were from nine Catholic Dioceses, independent schools and government secondary schools. To obtain access it was necessary to gain Human Research Ethics Committee approval from RMIT and ethics committee approval from each of the education sectors. The Catholic Education Offices approached included Armidale, Bathurst, Broken Bay, Canberra-Goulburn, Lismore, Maitland-Newcastle, Parramatta, Wagga Wagga, and Wollongong. Lismore was the only Catholic Education office to decline the request for access to survey textiles teachers and students in their area. Approval was also sought and obtained from the Department of Education and Training and the Independent schools were approached individually with RMIT HREC approval.

A condition of access was that all correspondence should go to the Principal for each school with a request for approval. I received approval from fifteen Principals two weeks after the first survey kits were sent out. A facsimile was then sent to all school Principals thanking those who had responded and reminding those who had not returned a consent. As a result of the reminder facsimile a total of thirty government schools, eight Catholic colleges, and two Independent High Schools replied. As a data set this represented 30% of the possible response with a balance of Government schools: Catholic Schools: Independent schools of 15:4:1, differing from the true ratio of 12:2:1. The sample has a bias, with double the proportion of Catholic Schools. This outcome may be explained by the fact that I have been a lecturer at the Australian Catholic University for over twelve years and am probably better supported in this sector than the other sectors. The sample, therefore, cannot be said to be representative, and the findings cannot be generalised across the state. The sample does, however, provide rich data on which to develop teacher training and developmental strategies for the future of the study of textiles in NSW secondary schools.

3.4.1 Description of background information
There was a good blend from schools all over the state with representation from each of the Catholic Dioceses and each of the regional areas that agreed to participate.
From these forty schools I received 58 textile teacher surveys and 40 head teacher surveys. There were only five responses from male technology head teachers. There are two possible explanations for the limited response from male head teachers. First, it may be the case that textiles and design is more likely to be offered in schools if the head teacher of technology has an interest in textiles or a home economics background. Second, as the head teacher surveys were for head teachers in Technology it is understood that not all head teachers would see the relevance or importance of the study, especially if they had an industrial arts background. This may indicate that the Principal’s consent could have been influenced by the Technology Head teachers willingness to participate in the study. The only way to check if the missing schools were predominantly of technology head teachers with an industrial arts background would be to telephone all the possible responding schools to obtain a tally of industrial arts backgrounds and home economics backgrounds among head teachers.

A reminder facsimile was sent to all school Principals thanking those who had responded and reminding those who had not sent in approvals. As a result of the reminder facsimile a total of thirty-five government school principals, eight Catholic college principals and two Independent High School principals approved the study. As a data set this represented 29.8% of the possible response and the balance of 18:4:1 differed from the true ratio of 12:2:1 Government schools: Catholic Schools: Independent schools. The sample therefore has a bias, with double the proportion of Catholic Schools represented. This may be explained by the fact that I have been a lecturer at Australian Catholic University for over twelve years and am probably better supported in this sector than the others. There was a good blend of schools all over the state, with representation from each of the Catholic Dioceses and each of the regional areas. If the principals had checked with the Head Teachers of Technology before approving, it is possible that not all Head Teachers would see the relevance or importance of the study if they were more philosophically oriented to design and technology or industrial arts. There were only five responses from male head teachers. There was no preparation in the design of the study to identify the representative nature of this statistic. The representative nature of this finding could only be possible if all schools were contacted by telephone to ask the background and gender of the head teacher of technology. The gender and background of head teachers is a sensitive
issue in design and technology (Cunningham, 1993b) and permission was not obtained to make this cross reference. It was interesting to note that not all head teachers responding were from home economics or an industrial arts background. Some had a visual arts background.

From the 45 participating schools I received 45 head teacher surveys and 57 initial textile teacher surveys. Of those 57 teachers, 25 agreed to participate further with extended response surveys and interviews. Of those 25 teachers nominating for further participation in the initial survey, 17 returned the extended response survey and seven were chosen to be interviewed on the basis of these responses. The seven were chosen from different areas in the state and different types of schools.

There were 267 student surveys returned, representing 16.5% of the students enrolled for HSC Textiles and Design. The proportion of males in the survey was similar to the 2% of males represented in the Textiles and Design candidature. Responses were received from five males. More support for the choice of a year 11 cohort came in discussion with teachers. It was found that quite often schools manage to get a year 11 Textiles and Design class but when numbers drop off and there are not sufficient students to support a Year 12 class the remaining students enrol with Distance Education. The numbers appear to vary more in enrolment from year 11 to year 12 in lower socio-economic areas where there is less expectation that the students will attend university. Textiles may also be considered an easy option for students not sure about their future or for those who are less academically inclined. These students are more likely to leave school without completing their Higher School Certificate.

In phase two of the study permission was obtained to survey the first student teachers to participate in the joint Whitehouse Institute and Southern Cross University teaching degree for Design and Technology Teachers specialising in Textiles and Design (n=3) and the third and fourth year students in Australian Catholic University Bachelor of Teaching / Bachelor of Arts – Technology specialising in food and textiles (n=30).
3.4.2 General description of respondents
All the secondary students surveyed were invited to participate in the study by their textiles teacher. The majority of the secondary students surveyed were female and currently enrolled in the preliminary HSC Textiles and Design course. The textiles teachers surveyed were currently teaching textiles and design in schools. There was limited access to student teachers. Thirty Australian Catholic University students from a possible thirty-two third year and fourth year food and textiles majors in the Bachelor of Teaching/ Bachelor of Arts - Technology students formed the majority of student teachers surveyed. Three of a possible six third year students at Whitehouse School Fashion Diploma, who will be given qualifications to teach under a regional university, completed a survey of open-ended questions. This survey is available in Appendix D. The Whitehouse School of Fashion is new to the technology teacher training arena as is the College of Fine Arts (COFA) of the University of New South Wales. These two institutions represent the shift of emphasis in textiles technology from a textile science focus to the more practical ‘design’ focus of the new textile syllabuses from Stages 4 to 6. It was not possible to access students from Southern Cross University, COFA, Newcastle University, University of Technology Sydney, Wollongong University, or Avondale College. Sydney University is not included in the list of universities offering support for textiles teacher training as they have discontinued their undergraduate program for technology teaching and only offer a small number of places for students studying to gain qualifications to become technology teachers through the Master of Teaching Program. The next section discusses the processes involved in gathering data from Head Teachers Technology, textile teachers and textile students.

3.5 Phase one
3.5.1 Purpose of phase one
The purpose of phase one was to gather quantitative data contributing to the knowledge of the age, gender and length of service of teachers currently teaching textiles and design. It also gathered limited qualitative data to gain a picture of the textiles experiences of both textiles teachers and secondary students and their perception of the value of textiles education.
3.5.2 Instruments used to collect data

Three main factors determined the structure of the survey instruments for this study. First, the research literature revealed limited evidence describing textiles teachers in NSW – their age, gender, qualifications, years to retirement and their perceptions of the value of the study of textiles. Second, there are numerous studies of the value of textiles for the elderly (Schroll, et al, 1993; Reynolds, 2005) the critically ill (Predeger, 1996; Lane, 2005a; Lane, 2005b), children in history (Cavanagh, 2004; Peacock, 1982; Kyle, 1986) and in the arts (Hall, 2004; Mason, 2004) but few, if any, of the value of textiles education to adolescents in contemporary society. Third, students’ and teachers’ perceptions of the value of textiles in secondary schools may be influenced by the cultural influences of home, family and community (Wallace, 1956; Douglas, 1982; Kolbe, 1984).

Mind mapping the issues that have come to light from my reflection of the cultural dynamics of textiles education in secondary schools resulted in Figure 4. It serves as a predictive model of the relationship between participants and the information they will provide that will influence the perceived value of textiles in secondary schools.

![Figure 4 Conceptual Framework of the Value of Textiles Education(VOTE)](image)

Dunkin and Biddle (1974) argue that in formal education programs, the background and demographic characteristics that both learners and the educator bring into the classroom influence the teaching and learning process. The first phase of the study
uses an adaptation of a model of the study of classroom teaching proposed by Dunkin and Biddle (1974). It provides a holistic picture of teaching variables (p. 38). The variables have been modified to provide a clearer picture of the influences on the value of what is taught in the textiles classroom. The major elements are presented as Presage Variables relating to the teacher; the Context Variables relating to the student and the school/community; Process Variables relating to the classroom, and Product Variables showing student outcomes. According to Anderson and Burns (1989), the Dunkin and Biddle (1974) model is the best known of all models that exist for educational research (1989, p. 31). The model is not an explanation for student learning or for teacher-student interaction. It is a model for research into teaching that identifies classes of variables to study. Table 4 on the following page indicates how the Dunkin and Biddle influenced the survey design.

The model gives valuable insights into the impact of the school and social context on students’ attitude to textiles, and therefore into the value they place on the subject and the value they perceive as coming from the study of textiles.

As the Dunkin and Biddle model (1974) was designed for the observation of teaching and learning in the school environment, the variables were modified to suit this study. In the following table the left column sets out the variables that were suggested by Dunkin and Biddle (1974) and the right column shows how those variables were modified to accommodate variables better measured by mail survey and relevance to this study. Instead of indicating social class, participants were asked to indicate the postcode of home and postcode of the school. This had the purpose of identifying the location of teachers and strong ‘textiles schools’. These variables guided the development of the initial quantitative survey to give detail of the site of research and the characteristics of respondents.
Table 4: The influence of the Dunkin & Biddle Model on survey design.

<table>
<thead>
<tr>
<th>Dunkin and Biddle Model</th>
<th>Value of Textiles Survey Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher formative Experiences</strong></td>
<td></td>
</tr>
<tr>
<td>Social class</td>
<td>Home Postcode &amp; School Postcode</td>
</tr>
<tr>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td>Sex</td>
<td>Gender</td>
</tr>
<tr>
<td><strong>Teacher Training Experience</strong></td>
<td></td>
</tr>
<tr>
<td>University attended</td>
<td>Training &amp; Qualifications</td>
</tr>
<tr>
<td>Training Program</td>
<td>Work other than classroom teaching</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>Years of service – full time / part time</td>
</tr>
<tr>
<td><strong>Teacher Properties</strong></td>
<td></td>
</tr>
<tr>
<td>Teaching skills</td>
<td>Teaching subjects in school</td>
</tr>
<tr>
<td>Intelligence</td>
<td>Textile interests outside school with family, friends and colleagues/instructors</td>
</tr>
<tr>
<td>Motivations</td>
<td>Professional Association membership</td>
</tr>
<tr>
<td>Personality traits</td>
<td></td>
</tr>
<tr>
<td><strong>Pupil Formative Experiences</strong></td>
<td></td>
</tr>
<tr>
<td>Social class</td>
<td>School postcode</td>
</tr>
<tr>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td>sex</td>
<td>gender</td>
</tr>
<tr>
<td><strong>Pupil Properties</strong></td>
<td></td>
</tr>
<tr>
<td>Abilities</td>
<td>School experiences</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Textiles interests outside school with family, friends and colleagues/instructors</td>
</tr>
<tr>
<td>attitudes</td>
<td></td>
</tr>
<tr>
<td><strong>School and Community context</strong></td>
<td></td>
</tr>
<tr>
<td>Climate</td>
<td>No. teachers on the Technology Staff</td>
</tr>
<tr>
<td>Ethnic composition</td>
<td>No. teachers (NT) teaching textiles</td>
</tr>
<tr>
<td>Bussing</td>
<td>NT capable of teaching textiles</td>
</tr>
<tr>
<td>School size</td>
<td>No. of textiles classes offered and the class year they are offered to</td>
</tr>
<tr>
<td>Class size</td>
<td>No. of students in each class</td>
</tr>
</tbody>
</table>

The textiles teachers and students were also asked to comment on the availability of materials for textiles projects in their area. This information was then cross checked against the numbers of students enrolled in HSC Textiles and Design to identify if the availability of textiles materials had any correlation to the number of students.
studying textiles in the areas of better provision. A Likert scale was used for both responses on variety of materials and on the quality of materials. There are several reasons for using Likert scales. First, these scales have been found to communicate interval properties to the respondent, and therefore produce data that can be assumed to be intervally scaled (Madsen 1989; Schertzer & Kernan 1985). The intention is to identify any relationship between the availability of textiles in an area and the strength of textiles in the schools in the area. The response was set out on a Likert scale to limit the range of responses for more manageable interpretation. The structure of the question follows.

How would you describe the **variety** of materials available for textile projects in your area?

Excellent        good        fair        poor        not sure

How would you describe the **quality** of materials available for textile projects in your area?

Excellent        good        fair        poor        not sure

The head teacher survey contributed the data regarding support for textile education in schools. The structure of the questions relevant to the school context follows.

How many teachers are on the technology staff? Full-time ___ Part-time ____

How many teachers on your staff are capable of teaching Textiles

Years 7-8 _____   Years 9-10 _____   Years 11&12 ____

How many teachers on your staff are willing to teach Textiles

Years 7-8 _____   Years 9-10 _____   Years 11&12 ____

If textiles is not offered in a particular year group it is most likely because

- There is limited demand from the students
- The staff are not interested in teaching the subject
- The staff are not available to teach textiles

There was also a common item given to head teachers, textiles teachers and students. The item given was “Please give your perspectives (in point form) of the value of textiles in secondary schools.” The question did not make any reference to the definition of the ‘value of textiles’ which referred to the benefits of the subject in the school, how important it was in the school, and how beneficial the subject is to individual students within the school. The intention was not to lead the response and sufficient space was allowed for considered opinion (Denscombe, 2003). This
question identified quite clearly those who were passionate about the study of textiles and those who did not value the subject on any level.

3.5.3 **Explanation of data analysis**
Probability sampling has set the standard for social research but qualitative samples tend to be purposive rather than random (Kuzel, 1992; Morse, 1989). As it was my intention to use the survey as a preparation of a more qualitative approach to the study the sample responding represented those who had an interest in the study. As the pool from which the sample could be drawn was already small, random sampling of that group can also produce bias (Miles & Huberman, 1994, p. 27). According to Miles and Huberman (1994) sampling in qualitative research involves two actions 1) the setting of boundaries and 2) a frame to uncover, confirm and qualify the basic processes or constructs that support the study (p. 28). The frame required representation from Government, Catholic and Independent schools from across a broad cross-section of the state. For this study the boundaries were set on schools in NSW offering Textiles and Design for year 11 in 2003. This information was gained from The NSW Board of Studies. The list included schools that had not been listed in the Higher School Certificate data in the previous year.

The addresses of the schools were obtained by purchasing the file on all secondary schools in NSW from The Board of Studies. This file was emailed in an xls file format. The file included telephone and facsimile numbers that were valuable in follow-up to the schools. The All Schools file was then used with the Board of Studies Textiles and Design Year 11, 2003 enrolment details, also emailed in xls file format. This created a file that could then be used to post out requests to school principals to participate in the study. Having the school addresses in this format made it easy to create a mail merge for the follow-up facsimiles.

Three different surveys (Appendix B1, B2 & B3) for the head teacher, textile teachers and senior textiles students were sent out with the Principal’s consent letter. The teacher consent letter and the Student Carer consent letter were also included (Appendix B4 & B5). The survey kit included one head teacher survey, 3 textile teacher surveys and consent letters, and 10 student surveys and consent letters. The teacher consent letters also invited participation in an in-depth interview that would be
conducted at their convenience. Those wishing to participate gave their names and preferred contact details either by telephone or email. The schools organised the completion of consent forms and surveys and returned them to The Australian Catholic University locked bag address. Timelines of access, negotiation, and collection of data will be found in Appendix A. The first survey kits were sent in November 2004, as soon as approval was gained from the relevant authorities. Survey kits were sent to government schools in January 2005 with those for the remaining Catholic Schools.

Preliminary data collections and recording from February to May informed the preparation of the in-depth teacher survey and interview questions. In June 2005 a facsimile was sent out to thank the schools that had responded and to remind the schools that had not responded. The facsimiles sent to the schools that had not responded included the original letter to the Principal and a full set of the surveys and consent forms. Data was collected until the end of July, 2005 and a complete analysis of the quantitative data was commenced in August, 2005.

A spreadsheet was set up to collate the results of the survey questions for each group – head teacher, textiles teacher and textiles students. As the responses were of both quantitative and qualitative nature, the quantitative data on the presage variables – postcode, age, gender, years of service, training and qualifications, work other than classroom teaching and their teaching subject - were coded and put into spreadsheet format. The codes assigned to ‘qualifications’ and ‘other work’ can be found in Appendix E.

The context variables that appeared on the second page of the survey were entered into a second spreadsheet document which included how textiles was offered – in design and technology or in textile elective subjects - the numbers in the classes and the number of teachers who were qualified and willing to teach each year group. Similarly the textile teacher presage variables – postcode, age, gender, years of service, training and qualifications, work other than classroom teaching and their teaching subjects - were coded in the same way as the Head teacher responses and were organised into spreadsheet format. The additional presage variables were seen as important to the study. The additional postcode for home was included to identify the
distribution of teachers as well as where they teach and the variable of intended future service was included.

There was only one context variable that I considered important to the textile teacher that was not already answered by the head teacher, and that was regarding perceived quality and variety of textiles products available for use in textile and design projects. This response was tabulated with the postcode so that it could be matched against the region to identify, if any, a relationship between the availability of textiles materials and the popularity of the subject in a particular region. The student context variables of postcode, gender and school year were entered in spreadsheet format with their career choices and whether or not they were interested in teaching textiles.

**Computer Analysis**
The next step was to analyse transcribed material using the computer software program NUDIST*Vivo (N*Vivo), which has been developed by Richards and Richards (1991). N*Vivo facilitates the storage of data, coding and retrieval of material, and conceptual analysis using a grounded theory paradigm (Richards and Richards 1991, p. 38). I attended three two-day workshops, and a single day seminar, on using the N*Vivo software program, in order to develop expertise and comfort with the program. I used N*Vivo as at the time it was the latest development in computer software programs for qualitative research, and in my experience was more logically organised and user-friendly than similar programs such as Ethnograph. Dr Pat Bazeley, the workshop facilitator, provided all workshop participants with a user manual she had developed. The software developers have established email and website addresses, to allow consultation on the application of the program. A workbook and update of the program was available for downloading from the website (www.qsr-software.nvivo.update.install).

Using this program, data was coded and organised into categories to identify connections and generate theory to explain the patterning of data. The open ended responses were recoded in word documents for each student and saved in rich text format to be used for analysis in N*Vivo. Responses to the final question on the survey that were common to all three surveys in phase 1 and qualitative in nature were entered into a word document and saved in rich text format for analysis in the
data analysis software N*Vivo. For each group, responses were entered into one document by auto coding, formatted with a heading for each respondent. By keeping the group responses separate it was possible to identify the themes that were important to each group and then identify the similarities and differences in perceptions of the value of textiles.

All the demographic and other quantitative data from the initial surveys were entered into spreadsheet software to be used as document attributes for the qualitative data analysis software N*Vivo. There was a file created for Head Teachers, textiles teachers, student teachers and textile school students. Each was saved as a delimited text file and imported through the document attributes function of the N*Vivo software. This then formed the basis on which matrix intersections could be formed with the coded qualitative data.

The responses were coded for popular themes particularly around reports of skill development, opportunities for future employment, personal development and creativity. Matrix intersections were formed to identify the differences and similarities between Head teachers, textile teachers and textiles students in their perceptions of the value of textiles. This was checked against the conceptual framework of factors influencing the value of textiles (Figure 6). The coded data was analysed from a qualitative perspective and then quantified for export back to spreadsheets for tabulation and summarizing the predominant values identified by each group. This analysis only involved the groups that had a direct relationship and therefore the student teachers were not included in this analysis and nor were they specifically asked their impressions of the value of textiles, though this unexpectedly, came through in answers to other questions.

Using the qualitative data on students’ textiles experience, it was possible to identify how textiles experience outside the classroom impacted on the student perspectives of the textiles experiences in schools and how that impacts on their perception of the value of textiles in school. It was also possible to identify any relationship between perspectives on the value of textiles and the consideration of becoming a textiles teacher. Using the quantitative attributes of postcode it was possible to suggest the areas that may be most likely to have textile teachers available in the future.
3.5.4 Summary of phase one
The process of data collection obtained responses regarding the textiles experiences of textiles teachers, secondary textiles students and the head teachers of technology. The survey instruments were valuable in gathering demographic data on the students and teachers, quantitative data on the teaching experience and their potential future teaching experience and limited qualitative data on their perceptions of the value of textiles education in secondary schools.

3.6 Phase two

3.6.1 Purpose of phase two
Phase two of the study provided an opportunity to enrich the data gathered in phase one and gain depth of understanding into the themes that emerged from the data collected in phase one.

3.6.2 Instruments used to collect data
At the bottom of the teacher consent form the teacher could nominate for a further questionnaire and interview. The extended response questionnaire (Appendix C1) and questions for the interview (Appendix C2) were a response to data collected in phase one and provided more detail on the perceptions of what constituted an effective textiles teacher and gave some further insights into how the interest in teaching textiles develops and is sustained. The students gave a strong impression that their enjoyment of the subject and the value they put on the subject were closely related to the nature and performance of the teacher. This is of course not surprising as it is in keeping with the Australian Government Quality Teacher Program Newsletter of June 2004 indicating that research suggests (Hattie, 2003; Cuttance & Owen 2001) that teachers make a difference. The interview questions, therefore included a question regarding the teachers knowledge of the NSW Model of Pedagogy (NSW DET, 2003).

Telephone calls were made to those teachers who volunteered their telephone numbers for the second phase of the study. Those preferring to be contacted by email were contacted by that method. It was important that the teachers interviewed were from different school systems, different areas in the state and of different age groups. This was not for comparison purposes, but rather to obtain as diverse perspectives as were possible from the sample. The interviews were conducted in association with seminars on Innovative Textiles conducted in different regions around the state. In
this way it was possible to position the interview respondent in the context of the area in which they were situated. It also provided the opportunity to open communication channels with teachers across the state and learn of any common problems regarding the value of textiles education in the schools. Extended response surveys and interview questions can be found in Appendix C1 and C2. The interview questions were used as a guide for a semi-structured interview to allow the interview to flow and to give the teacher every opportunity to contribute to the knowledge of the value of textiles and the training for future secondary textiles teachers. The interview questions were trialled before they were used on the phase 2 participants. The interviews to be included in the study were recorded, with ethics approval, with full knowledge of the participant. I transcribed the teacher responses to interview questions as soon as was possible after interview.

The teachers initially chosen to be interviewed were selected from 17 teachers who agreed to fill in the extended response questionnaire and nominated for interview. The responses to the questionnaires were transcribed as they arrived either by facsimile, email or by post. Using the presage variables, six of these were chosen for interview. This was done to make the most use of the varieties of background and the location of their teaching. The interviews were organised at the teachers’ convenience. Some teachers preferred to be visited at their school, others preferred a telephone interview and others made themselves available after the Textiles Innovation seminars I offered in different areas of the state. The interviews were tape recorded with the participants’ consent and lasted approximately 30 – 45 minutes. Six teachers were interviewed. Four of the teachers were experienced teachers that had successful students in the HSC Textiles and Design Examination. The other two teachers were younger teachers with different backgrounds that would like to be able to teach HSC Textiles and Design students in the future. The choice of interviewees in a multi-case sampling, as Miles and Huberman (1992) suggest, needs an explicit sampling frame and thought through carefully (p. 29). The question of how many cases was determined by the sampling frame to give confidence in analytic generalisation. It was also recommended that more than fifteen cases can become ‘unwieldy.’ Qualitative studies call for continuous refocusing and redrawing of study parameters during fieldwork, but some initial selection is still required (p. 30).
The initial teachers interviewed were the experienced teachers. They were from each age group defined in the initial survey except for the over 60 age group. One was from the 51-60 years age group; two from the 41-50 years age group (one a head teacher who taught textiles the other an assisting textiles teacher); and one from 31-40 years group, all female, three were from country areas and two from different metropolitan areas. One was from a Girl’s Independent school, one was from an all girls Catholic Colleges and two were from government schools (one selective metropolitan girls’, and one co-educational country school). Two were from home economics training, one was from Design and Technology training and one was from Fashion TAFE training. There is a bias toward the country schools as the teacher shortages are greatest in the country areas. It is important to develop strategies to best support the country schools.

Description of experienced teachers
The majority of the teachers in this category are Home Economics trained as they were seen as those best representing the most prevalent teachers of senior textiles in secondary schools over the last 20 years. A valuable contribution was made by fashion teachers displaced by changes in the TAFE system and subsequently employed by the secondary schools system. As the formal training for secondary textiles teachers is now under Design and Technology it was important to include one of the most experienced of these graduates in the sample interviewed. It was also important to cover the range of educational systems and regions in NSW. It is acknowledged that these teachers can not be considered representative of the areas they are teaching in but their inclusion provides an opportunity to gather a variety of opinions. These teachers were chosen from those who agreed to a further interview on the initial consent form. The choice of these teachers was a combination of familiarity with the teachers work and identification across as wide a cross-section in age, region and background as possible.

1. 51-60yrs, selective high school, Met East, home economics trained.
2. 41-50yrs, head teacher, co-educational senior college, North Coast, TAFE fashion background.
3. 41-50yrs, co-ed government school, North West Region, home economics background.
4. 31-40yrs, independent girls school, Northern Metropolitan area, design and technology background

**Description of inexperienced teachers**

Throughout the study it became increasingly obvious that the younger less experienced teachers had a valuable contribution to make to the study. Initially my perception was that the future of textiles in NSW secondary schools hinged on the contribution the longer standing teachers could make before retirement. Comments by the experienced teachers and comments by inexperienced teachers at professional association meetings caused quite a change in this perspective and so the contribution of these inexperienced teachers was noted.

5. 21-30 yrs, Co-ed government junior high school, Central Coast Region, Design and Technology majoring in Food and Wood technology

6. 21-30 yrs, Co-educational catholic school, North Western Metropolitan, retrainee from hospitality background

The teachers names were not identified in the interview transcript; but by a general description of the school and region in which the teacher was located, coded for identification by the researcher as indicated above.

3.6.3  **Explanation of data analysis**

The interviews were transcribed and analysed using the N*Vivo analysis software to code the comments under the themes that developed from the initial and consequential extended response surveys in a similar manner as described in detail in phase one.

3.6.4  **Summary of phase two**

Teachers nominated themselves for the extended response questions by completing the expression on interest at the end of the initial survey. The answers to the extended response questions and the demographic information on the teachers determined the teachers that were to be interviewed. This was to gain a wider breadth of opinion to inform the questions

3.7  **Phase 3**

3.7.1  **Purpose of phase three**

Survey data obtained from student teachers were to provide knowledge of the future of textiles education. As there is no longer training available for the preparation of specialist textiles teachers there was a need to identify the intention of technology student teachers to support the teaching of textiles in secondary schools. As student
teachers are in a unique position to align their thoughts with both the needs of students and the challenges of teaching, their perceptions of the contribution textiles education makes in the secondary classroom provides a valuable dimension to the study.

3.7.2 Instruments used to collect data
The extended response teacher survey was modified for the student teachers’ questionnaire in the light of the teacher responses. To inform the question of quality of textiles teachers, the teachers and the students were given similar questions. The third and fourth year technology students specialising in food and textiles studies were chosen for the study as they had participated in teaching practicum and could give their opinion on the facilities they experienced in the schools and their perceptions of the support for textiles education in the school. The third year students had completed all their textiles academic studies and the curriculum units but had not had as extensive experience in a teaching role in schools as the fourth year students. By using a similar survey instrument with student teachers as with textiles teachers consistencies and differences in standards, and expectations and perceptions of preparedness to teach textiles in secondary schools, could be identified in analysis. This information in turn informs issues to be addressed in teacher training. The student teacher survey can be found in Appendix D.

3.7.3 Explanation of data analysis
The data were transcribed into word files that allowed coding by the question in N*Vivo. By setting up a template file in word the data from each survey could be entered with a unique number. All the responses to each question could be grouped together to identify common themes forming in the data. The identified themes could then be matched against those expressed through the teacher and student survey data as well as the themes developed in the teacher interviews.

As a means of investigating the argument put forward by head teachers and textiles teachers in phase one of the study, that textiles education is linked to improved student outcomes, the quantified themes of the value of textiles are checked against The NSW model of pedagogy presented in the Quality teaching in New South Wales public schools: Discussion paper (NSW Department of Education and Training [DET], 2003) There are three dimensions in the model and six elements for each dimension as indicated in the following table.
The NSW Model of Pedagogy (NSW DET, 2003) outlines the three dimensions that represent classroom practices that have been linked to improved student outcomes. These dimensions are used to assess the value of the pedagogy used in the textiles curriculum in NSW secondary schools. For each of the dimensions there are six elements that are matched to the responses of head teachers, textiles teachers and students on the question of the value of textiles education in secondary schools. The three dimensions are intellectual quality, quality learning environment, and significance. Intellectual quality refers to pedagogy focused on producing deep understanding of important, substantive concepts, skills, and ideas. Pedagogy that establishes a high quality learning environment refers to pedagogy that creates classrooms where students and teachers work productively in an environment clearly focused on learning. Such pedagogy sets high explicit expectations and develops positive relationships between teachers and students and among students. Pedagogy that generates significance refers to pedagogy that helps make learning more meaningful and important to students. Such pedagogy draws clear connections with students’ prior knowledge and identities, with contexts outside the classroom, and with multiple ways of knowing or cultural perspectives.

3.7.4 Summary
Phase three made use of the student teachers’ perceptions of textiles education in secondary schools. Their observations contribute to the vision of the possible future of textiles education as well as providing a range of perspectives from that of students to the responsibilities and challenges of teachers.
3.8 Limitations

As the response rate could not be considered representative of the population of Technology Head Teachers, textile teachers and students, the study is descriptive, and though important in starting a dialogue in the area of textiles education in NSW, cannot be generalised across the state. The impact of social class on the perception of the value of textiles education is not without relevance yet is outside the parameters of the study. By identifying the strength of textiles education in different regions, the impact of social class may be included as a concern for future research.

It was not possible in the design of the research to assess the knowledge and abilities of the students effectively, yet by enquiring into their experiences in textiles with family and friends and within the school setting it was possible to provide a profile that may impact on their attitude to the value of textiles. Therefore in the Dunkin and Biddle model (1974) ‘abilities’ and ‘knowledge’ were replaced by ‘experiences.’

It is difficult to ascertain whether the schools that do not offer textiles do not value the subject or whether traditionally the school has not been set up to deliver such a program. This is outside the parameters of the study as the data set used for the study only includes schools that offered Textiles and Design in Year 11 in 2003.

3.9 Chapter summary and conclusion

The methodology was designed to draw data from all those who contribute to the valuing of textiles education in secondary schools and possibly the future of textiles education. The three phases of data collection build on each other to develop a rigorous purposeful study. The findings of the study are presented in the following chapter and discussed in chapter 5.
CHAPTER 3
METHODOLOGY

3.1 Introduction
A central aim of this study is to gain an accurate description of the participants in, and their perceptions of, textiles education in secondary schools in New South Wales (NSW). From these perceptions of textiles education, the intention was to gain insights into the possible factors that influence the valuing of textiles education and how that valuing can be enhanced in the future. There was no attempt to define or clarify the meaning of the value of textiles to the participants, preferring instead to elicit more nuanced responses beyond the researchers anticipated responses. The researcher anticipated that participants may address three separate aspects of the value of textiles, these included 1) the benefit of the study of textiles to the students in skill development and the development of self esteem and relaxation, 2) the benefit of offering the study of textiles within the school to support extra curricula activities such as musical performances and displays, and 3) the status of the study of textiles in relation to other subjects in the school. By not defining these three areas the responses were anticipated to reflect more spontaneous perspectives rather than guided responses.

This study is conducted with a mixed method approach in three main phases.
In preparation for the study, data was obtained from The NSW Board of Secondary studies (BOS) on enrolments in the preliminary and Higher School Certificate (HSC) Textiles and Design Course. The data provided the details of schools offering the course and the change in enrolment numbers from 1999 to 2003. The first phase of the study collected descriptive quantitative data and data related to the secondary textiles education experience, through a mail questionnaire sent to the teachers and students actively involved in textiles and design programs in NSW secondary schools. The schools surveyed were those identified by the BOS data as offering the Textiles and Design course. The vision of textiles education in secondary schools in NSW is further enhanced by the gathering of data from head teachers of technology on the number of classes offering textiles education and the number of students in those classes, to support the thesis that textiles education is experiencing revitalisation. An open question was directed to all participants on their perceptions of the value of textiles in secondary schools. As part of the consent process, teachers were given the
opportunity (in the first phase of the study) to volunteer to complete an extended response questionnaire and participate in an interview organised at their own convenience during the second phase of the study.

The second phase provided an opportunity to inform the findings from the first phase and guide the study toward recommendations for future textile teacher training. The third phase questioned student teachers enrolled in the Bachelor of Teaching/Bachelor of Arts –Technology, Australian Catholic University on their preparedness to teach textiles in secondary schools and their perceptions of the support for textiles education in the secondary schools in which they had completed practice teaching.

This research also draws upon personal experience as a member of curriculum committees over a period of 10 years and in particular the consultative committee for the new HSC Textiles and Design (T&D) syllabus, the writing committee for the same syllabus, and (once the syllabus had been introduced), the examination committee. My personal experience has led to the recognition that while a group of individuals may be charged with responsibility of developing a new curriculum, the teachers who present the curriculum to the students have to believe in its value if the benefits of textiles education are to be realized in schools.

The aims of the study were

- To identify the value of textiles education in secondary schools in NSW
- To determine the extent to which teacher training has affected or will affect on the teaching of textiles courses post 2010
- To develop strategies to support the growth of textiles education in NSW secondary schools

### 3.2 The research design

The research design for the project is set out in Table 1, 2 and 3. The tables outline what I investigated, why and how I gathered the information in the three phases of the study. Table 1 outlines phase 1 school survey data collection. Phase two data were collected from teachers’ extended response questionnaires and interviews, outlined in Table 2. Phase three data were accessed from the student teachers’ survey and is outlined in Table 3.
<table>
<thead>
<tr>
<th>What to Investigate</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 – Head Teachers, Textiles Teachers and Textiles Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The characteristics of teachers age, gender, years of service, education, years to retirement</td>
<td>To provide an image of the quality of the teachers and how much longer they intend teaching</td>
<td>Using Board of Studies data, survey schools in NSW that offer HSC Textiles and Design</td>
</tr>
<tr>
<td>Textiles Experiences of Textiles Teachers</td>
<td>To identify the extent of their interest in textiles, professional development, and their expertise</td>
<td>Open ended questions on the original survey on textiles experiences with family, with friends and professional associations</td>
</tr>
<tr>
<td>Head Teachers background and teaching subjects</td>
<td>To test the hypothesis that textiles elective classes are more often offered in schools with Head Teachers of Home Economics Background who teach textiles</td>
<td>Head Teacher survey distributed to all NSW secondary schools offering HSC Textiles and Design</td>
</tr>
<tr>
<td>Numbers of textiles teachers on technology staff and number of elective textiles classes</td>
<td>To identify the strength of textiles education in different schools and areas and to determine relevance to the strength of T&amp;D in the school</td>
<td>Table for completion on Head Teacher Survey</td>
</tr>
<tr>
<td>Textiles Experiences of Textiles students both at school and outside school</td>
<td>To test the null hypothesis that students’ valuation of textiles in school is not enhanced by textiles experiences outside school</td>
<td>Open ended questions referring to textiles experiences in yrs 7&amp;8, 9&amp;10, with family, with friends and with instructors</td>
</tr>
<tr>
<td>The degree of interest of secondary textiles students in becoming textiles teachers</td>
<td>To gauge level of future enrolment in textile teacher training. Obtain characteristic profile of students who may be interested in teaching textiles</td>
<td>Question to identify their preference for a career in teaching textiles. Postcode identifies the location of the potential teachers in their regions.</td>
</tr>
<tr>
<td>The Head Teachers, textile teachers and textile students’ perception of the value of textiles in secondary schools</td>
<td>To ascertain whether perceptions of the value of textiles education are held by all involved in it.</td>
<td>Include the open ended question on the surveys for Head Teachers, textile teachers and textile students.</td>
</tr>
</tbody>
</table>
### Table 2 Phase two data collection

<table>
<thead>
<tr>
<th>What to Investigate</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 2 - Textiles Teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The attraction to teaching textiles</td>
<td>To gather ideas on how to attract teachers to teach textiles</td>
<td>Extended response questionnaire to consenting textiles teachers, clarified by teacher interviews with both experienced and inexperienced textile teachers</td>
</tr>
<tr>
<td>Contributions to the teaching of textiles</td>
<td>To gather ideas on how best to support textiles teachers in the future</td>
<td></td>
</tr>
<tr>
<td>Contribution teachers have made to other teachers, school and community</td>
<td>To identify the value of textiles education beyond the classroom</td>
<td></td>
</tr>
<tr>
<td>Teachers perceptions of the ideal textiles teacher, their characteristics and skills</td>
<td>To identify the characteristics and skills that we need to be developing in teacher training.</td>
<td>Extended response questionnaire to consenting textiles teachers.</td>
</tr>
<tr>
<td>The contribution teachers plan to make in retirement</td>
<td>To determine whether there are experienced teachers who would be prepared, in retirement, to mentor inexperienced teachers</td>
<td></td>
</tr>
</tbody>
</table>

### Table 3 Phase 3 data collection

<table>
<thead>
<tr>
<th>What to Investigate</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 3 - Design and Technology Student Teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attraction to teaching textiles</td>
<td>To gauge level of interest in teaching textiles after completion of qualifications</td>
<td>Questionnaire to consenting student teachers majoring in food and textiles at The Australian Catholic University and Whitelhouse School of Fashion</td>
</tr>
<tr>
<td>What future teachers have to contribute to school communities as textiles teachers</td>
<td>To identify if the students are aware of the value of textiles to a school community without leading their response</td>
<td></td>
</tr>
<tr>
<td>Students perceptions of what characteristic and skills contribute to the ideal Yr 7-10 textiles teacher and effective HSC textiles and design teacher</td>
<td>To identify if student teachers perceptions are in keeping with teachers perceptions</td>
<td>Review courses offered in University Admissions Centre Guide</td>
</tr>
<tr>
<td>Perceived strength of textile facilities in technology departments in schools</td>
<td>Gauge changing interests in textiles in secondary schools</td>
<td></td>
</tr>
<tr>
<td>The content details and enrolments in courses offering qualifications to teach textiles and design in secondary schools</td>
<td>To assess the number of students currently in training programs and the nature of their training</td>
<td>Obtain details of course structure from university websites. Obtain enrolment numbers from The Department of Education, Science and Training.</td>
</tr>
</tbody>
</table>
3.2.1 Justification of the methodology

As a researcher I have constructed a framework for the study based on respect for teachers’ demands of their context. The context includes the educational environment and the needs of student populations. A mixed method is well suited to the research study because it provides recognised methods of accessing relational data with minimal interruption to teachers or students and provides data rich in detail. Though subjective in nature, such data is able to be explored and analysed systematically to discern the emerging overall patterns that are not visible to individual participants in the study.

In phase 1 both quantitative and qualitative data were collected. An objectivist epistemology and survey methodology were used for the collection and reading of objective data on teacher and student demographics. The methodical rules of scientific research minimise the likelihood of error. In abiding by the discerning methodical rules of research, we gain confidence that our findings are accurate or error free (Ruane, 2005, p. 11). There was an attempt to survey every school that offers Textiles and Design in Stage 6 of secondary schools. Martin Denscombe (2003) states that surveys usually relate to the present state of affairs and involve an attempt to provide a snap shot of how things are at a specific time over a wide number of cases in a quest for tangible information that can be quantified (p. 6). The advantages of self responding written surveys are that they are purposeful and structured and tend to concentrate more on data than theory. This is important as not to bias the respondents for stage two of the study – the extended response and interview phase. The self responding written survey is also an effective and inexpensive way to cover the breadth of representatives over a large geographical area (Denscombe, 2003, p. 7). Although the main methodology follows qualitative methods, the survey data is quantifiable for nominal data.

According to Denscombe (2003) there are three disadvantages of using a postal survey. First there is a danger that the “data are left to speak for themselves”; second, that the data produced are likely to lack detail or depth on the topic investigated; third, that there is a limit to the degree to which the researcher can check the accuracy of the responses (p. 28). These disadvantages will be overcome by the mixed method approach that will follow up the survey data collections with a second qualitative
survey and interview. The research design does not allow for clarification of the student responses as it was not seen as feasible to include student interviews. Consideration of the breadth of the sampling across all the schools in the state offering Textiles and Design at Stage 6 will provide a valid and representative response.

The alternatives were to survey teachers at a textiles teachers’ conference, as has been the method used in past Home Economics research, or to use a telephone survey. Textiles teachers could be surveyed at a conference, but, this method would not gain access to the students and Head Teachers who might give a more complete vision of the culture of textiles education in the schools. Telephone surveys may be more effective in obtaining a response from Head Teachers, but could not be completed as anonymous responses. The issue of respondent honesty is more difficult to assess or control if the response is not anonymous, as humans are more likely to respond in a way that is acceptable to the researcher or that presents the respondent in best light with the possibility of introducing “social desirability bias” (Ruane, 2005, p. 124).

With the risk of a small response rate it was imperative that the quality of the response was secured. The three questionnaires used in the school are found in the Appendix B, as is the covering letter to the Principal, and the consent letters. The quality of response to the questionnaire was checked by piloting the questionnaire and resolving any ambiguities. More details of this process will be found in this chapter under Instruments and procedures to collect data. The questionnaire included questions related to demographics as well as more open-ended questions that were more qualitative in nature. The themes that arose out of the teachers’ open-ended question responses in the initial survey were followed up in the extended response surveys and interviews of teachers who volunteered to participate in phase two of the research. Details of these surveys and the interview questions are found in Appendix B.

The mail survey was not delivered until after obtaining ethics approval. Obtaining permission from all the Catholic Dioceses resulted in only one not willing to take part. In the process of approval from all school systems there was an insistence on the Principal being the first point of contact and approval in the schools before any surveys could be distributed. This stage in effect diminished the sample. A follow-up
fax reminding the Principals of the invitation to participate resulted in a larger number of respondents, as explained later in the chapter under *Unit of Analysis.*

The phase one survey provides some quantitative data on which to base the overall analysis of the qualitative findings of the study and provides valid attributes for the intersection matrix analysis in NUDIST*Vivo (N*Vivo). Details of this software and its use in analysis will be found later in the chapter under *Procedures.*

Using the theoretical frameworks of The NSW model of Pedagogy presented by the discussion paper, *Quality Teaching in NSW Public Schools,* I view the data from all respondents through a more critical analysis according to the three dimensions of quality teaching and eighteen elements to substantiate the claim of the value of textile education in secondary school. Details of this model will be found in section 3.9.

Through the Framework of Douglas’ (1982) Grid and Group, responses from the teachers are viewed in a cultural context. As Douglas comes from a science method background of anthropology, her framework is critical yet allows for the examination of consciousness using qualitative data to eliminate the separation of the knower from the known (Husserl, 1931). The theory of grid and group has been applied and adapted by many researchers (Spickard, 1989; Thompson, Ellis & Wildavsky, 1990, Coakley, 1992; Rayner, 1984; Lim, 1995) and in her introduction to the 1996 edition of her book *Natural Symbols,* Douglas states, “there have been great developments [in the theory grid and group(1982)]. The only thing that matters is the collaborative effort to think about life and human values with a tool that systematically questions the thinkers own starting point” (p. xxviii)

Douglas’ theory (1982) was used by Edward Harris in researching the evolving field of educational administration (2006, p. 147). He found the theory helped to bring order to experience and provided a common language to explain behaviours and interactions in a school setting (Harris, 2006, p. 131). As Harris found, the grid dimension refers to the degree to which an individual’s choices are constrained within a social system that dictates role expectations, rules and procedures. The grid can be plotted on a continuum from strong to weak. At the strong end of the grid continuum, roles and rules dominate the environment and restrain individual autonomy (Harris, 2006, p. 132). In his study hierarchy had an imposing impact on the individual and it was informing a vision of teachers for my own study. In an environment where the
head teachers make all the decisions, teachers have little freedom to select their own
methods of teaching and resources or even choice of classes in which to teach. The
Principal of the school may also impose controls over what electives are offered.

Husserl, considered the father of the phenomenological approach, focused on the need
for the researcher to suspend judgement and “bracket” preconceptions – to put them
aside deliberately – while taking note of our conscious act of knowing (Crotty, p. 79).
Husserl’s position shows an interest in the process by which we come to know things
consciously, rather than our consciousness of things. This is important in the context
of attributing value to anything. A value is a judgement and can be quite subjective,
yet viewed in context of culture and environment it is possible to be more objective in
assessment of the value of textiles education in secondary schools. As Wallace (1966)
states

It is one of the conspicuous features of modern science that major advances in
substantive knowledge depend upon major advances in the self-awareness of
the scientist. Only as the scientist comes to recognise and to take account of
the limitations imposed on his vision by the concepts he chooses to consider
important,…can he achieve the flexibility of approach required to solve new
problems (p. 2).

George Herbert Mead (1934), a philosopher and social psychologist, thought that
every person is a social construction. It is from the thought of Mead that symbolic
interactionism was born (Crotty, 1998, p. 62). Crotty (1998) also states
“constructionism is not subjectivism. It is curiosity not conceit” (p. 52). “Our culture
brings things into view for us and endows them with meaning and, by the same token,
leads us to ignore other things” (Crotty, 1998, p. 54). The differing opinions of
teachers and students regarding the value of textiles has been influenced by their
previous experience and therefore affects how they value textiles. The value that
teachers attribute to textiles education is influenced by the culture of the school in
which they operate. If they are not conscious of this influence they mistake vision for
reality. My philosophy of learning follows that of Peter Jarvis (2005) with his
existentialist perspective of learning. He sees learning as

the combination of processes whereby the whole person – body (genetic,
physical and biological) and mind (knowledge, skills, attitudes, values,
emotions, beliefs and senses) – is in a social situation and constructs an
experience which is then transformed cognitively, emotionally and practically (or through any combination) and integrated into the individual’s own biography (p. 7).

Jarvis’ (2005) theory was developed from that of Kolb (1984), who defined learning as “the process whereby knowledge is created through the transformation of experience” (p. 41). As the study of textiles provides a strong practical experience that draws on experiences related to the family and cultural contexts and has the potential to become a valuable part of the students’ future lives, I see the study of textiles as satisfying needs of the whole person. Further, Crotty (1998) posits that we need to recognise that different people may well inhabit quite different worlds. Their different worlds constitute for them diverse ways of knowing (p. 81).

As I am examining the cultural constructs of reality for the teacher and student in the school environment, the epistemology that I am working through for the qualitative component of the study is constructionism, and the theoretical framework symbolic interactionism. For the perceptions of the value of textiles this epistemology alerts us to the fact that a person’s reality is influenced by their environment. As a participant in the culture I am studying, recognising the understandings that have developed (Crotty, 1998, p. 80) through my interaction with textiles education over more than 40 years from the experience (with my mother at home to primary school, secondary school, teacher education and then as a teacher myself), has the potential to bias my observation. Patton (1990) sees the competing paradigms of positivism and phenomenology as constructs into which researchers are socialised. This process of socialisation produces norms and embedded assumptions about the best way to carry out research (p. 37).

In choosing the most appropriate research methodology, I was guided by my goal of working within a framework congruent with the field of study, education, and teaching practice. Patton (1990) states that the methodological framework is important to give direction to the study (p. 36). Such a framework depicts the logical links amongst the most important elements of the topic and embodies relevant, existing theories and philosophies. Flaws described by researchers experienced in qualitative methodologies include the labour intensiveness of data collection and analysis, researcher bias, inadequate sampling procedures and the utility,
generalisability and credibility of conclusions (Miles & Huberman 1994, p. 1). While these flaws are reduced through the use of computer software, Richards (1997) warns against falling into the trap of losing important aspects of qualitative methods, such as the focus on unique experience and rich data, in order to gain scientific status (1991, p. 41).

Rossman and Wilson (1984, 1991) suggest broad reasons for linking qualitative and quantitative data. Using both forms of data provides richness in analysis and it initiates new lines of thinking through attention to surprises or paradoxes, “turning ideas around” and providing fresh insight (Miles & Huberman, 1994, p. 41). Tashakkori et al (2003) state that mixed methods data analyses offer a more comprehensive means of legitimating findings than do either qualitative or quantitative data alone, by allowing analysts to assess information from both data types (p. 64). Given the advantages of a mixed method approach and the variety of data to be discussed, the mixed method approach has been used in this study.

Using enrolment data from the NSW Board of Studies for HSC Textiles and Design in secondary schools, survey data, follow up interviews and university enrolment data for design and technology teacher training, offers an opportunity to reflect on the phenomenon of the value of textiles education from the descriptions and explanations of all concerned in its instruction in secondary schools. Head teachers, textile teachers secondary students and student teachers all experience the phenomenon from different perspectives. Every perspective assists in the identification and analysis of embedded assumptions about the practice of teaching textiles. The second textiles teacher survey, seen in Appendix C1, was generated from data collected from the head teacher, textiles teacher and student surveys. The interview questions were designed to enrich the data, and to confirm and consolidate the development of theories arising from previous data.

As Denscombe (2003) suggests, interviews involve a set of assumptions and understandings about the situation which are normally associated with a casual conversation (p. 163). When deciding on the appropriateness of an interview there were two questions offered by Denscombe. “Does the research really require the kind of detailed information that interviews supply?” and “Is it reasonable to rely on
information gathered from a small number of informants?” As Patton (2002) suggests, justification for interview lies in the necessity to clarify previous survey data in a relaxed natural atmosphere that will enrich previously gathered data and get a sense of the experience and teacher feelings about teaching textiles and design in secondary schools (p. 343).

When participants consented to take part, it was in the full knowledge that their comments would be recorded and used as research data for the completion of the project specified. Gillham (2000), in his discussion on the interviewer as the research instrument, suggested that interviewers should keep their dialogue to a minimum and to encourage the respondent with subtle active listening. It was advised that the interviewer sit at a ninety degree angle from the respondent to prevent dominating eye contact. This relaxed positioning was achieved by sharing the microphone and sitting at adjacent sides of a table, as opposed to opposite sides of a desk. The interviewers conversation, facial expression, eye contact, head nods and gesturing were kept to a minimum, and “…through the clarity of that economy they (good interviewers) are able to steer interviewees to reveal what they know that is relevant to the focus of the interview” (p. 28).

In analysis the interview data was used with the second-phase survey questions in order to corroborate facts. For this reason the interview was semi-structured. Questions used are found in the Appendix C2. There were several questions to be addressed but there was some flexibility on the order the topics were put to the respondent for maximum relevance and flow of the interview. This flexibility allows the interviewee to develop ideas and speak more widely on issues raised by the researcher and to spend more time elaborating on points of interest (Denscombe, 2003).

The purists criticize mixed method research on the basis that it is neither sensible nor possible. They argue that the attributes of a paradigm form a “synergistic set” that cannot be meaningfully segmented or divided up to allow for a problem to be examined from different perspectives (Guba & Lincoln, 1984; Smith & Heshusius, 1986). By contrast, the pragmatic view, that paradigm attributes are logically independent and therefore can be mixed and matched in conjunction with method
choices allows for inquirer flexibility and adaptiveness to solve a problem (Reichardt & Cook, 1979). As Miles and Huberman (1984) comment, epistemological purity does not get research done.

The use of computer software increases the rigour of organising, interpreting and retrieving interview data. Some aspects of the data gathered in this study are quantifiable, and are presented in tables, but the data produced in studying the value of textiles and teaching practice are predominantly qualitative. The demographics of the participants were also used for document attributes in the qualitative analysis software.

3.3 Ethical Considerations
I completed the questionnaires developed by the Ethics Committees for RMIT University, The Department of Education and Training and the Australian Catholic University. I also made application by completing questionnaires for the nine individual Catholic Dioceses included in the study. The applications demonstrated my awareness of ethical issues relevant to the research, and showed that I had developed an appropriate information sheet and consent forms relevant to each participating group. The use of an information sheet and consent form ensured that applicants were informed about the purpose of the research, their rights as participants and my responsibilities as the researcher.

There have been many ethical issues to think through and address in this study. For example, the sampling procedures may attract questions regarding ethical issues pertaining to voluntary participation in research. In the sampling process, the Principals of the schools determined which teachers and students would participate, because the Principals were required to give their consent before the study could begin in their schools. Some Principals might have applied pressure to reduce the voluntary nature of participation. Others did not give their consent, and so prevented the participation of teachers who may have volunteered, given the opportunity. Another possibility is that the Principal consulted the technology Head Teachers before consenting, and if the Head Teachers had an Industrial Arts background, they may not have shown as much interest in the study as Head Teachers with a Textiles or Home Economics background. The agreement of Principals was a requirement set by
the Department of Education and Catholic Education Ethics Committee as a condition of approval and was therefore beyond the researcher’s control. There was no coercion and there were no promises of benefits to the participants. The researcher also had no control over the amount of pressure applied by teachers to obtain a ‘voluntary’ response from students.

It was noted in the ethics approval that no teacher would be identified with the comments given, yet some teachers made a point of stating that they were happy to be quoted by name. As the systems ethics applications did not allow this level of disclosure, all teachers’ interviews were coded with relevant data on age, gender, education, school type, and area only.

The Australian Catholic University student teachers were invited to an information meeting on the research. It was offered outside their lecture time and did not coincide with assessment of any unit that I was conducting with the students at the time. A letter and survey kit was sent to Leanne Whitehouse, Director of The Whitehouse Institute, requesting participation of her third year student teachers, and she gave the information sheets, consent forms and surveys to one of the lecturing staff for the group for completion by the students. There were no student teacher respondents from The Southern Cross University or University of Newcastle. As these universities are major contributors to the pool of teachers available to teach textiles in NSW their program information was obtained online and enrolment details from the Department of Education, Science and Training were considered for the assessment of available teachers beyond 2012.

The final ethical issue is in the nature of my contribution to the development of the current HSC Textiles and Design Syllabus. My interpretation of data collected will inevitably be viewed with the bias of one passionate about the contribution textiles education makes to the lives of students in secondary schools. As an academic seeking truth, awareness of this bias is tempered by the desire to present as rigorous a study as is possible.
3.4 Units of Analysis
The NSW Board of Studies holds data on enrolment numbers from each school. The sample was drawn from the 154 NSW schools that offered HSC Textiles and Design in the 2003 Higher School Certificate. These schools were from nine Catholic Dioceses, independent schools and government secondary schools. To obtain access it was necessary to gain Human Research Ethics Committee approval from RMIT and ethics committee approval from each of the education sectors. The Catholic Education Offices approached included Armidale, Bathurst, Broken Bay, Canberra-Goulburn, Lismore, Maitland-Newcastle, Parramatta, Wagga Wagga, and Wollongong. Lismore was the only Catholic Education office to decline the request for access to survey textiles teachers and students in their area. Approval was also sought and obtained from the Department of Education and Training and the Independent schools were approached individually with RMIT HREC approval.

A condition of access was that all correspondence should go to the Principal for each school with a request for approval. I received approval from fifteen Principals two weeks after the first survey kits were sent out. A facsimile was then sent to all school Principals thanking those who had responded and reminding those who had not returned a consent. As a result of the reminder facsimile a total of thirty government schools, eight Catholic colleges, and two Independent High Schools replied. As a data set this represented 30% of the possible response with a balance of Government schools: Catholic Schools: Independent schools of 15:4:1, differing from the true ratio of 12:2:1. The sample has a bias, with double the proportion of Catholic Schools. This outcome may be explained by the fact that I have been a lecturer at the Australian Catholic University for over twelve years and am probably better supported in this sector than the other sectors. The sample, therefore, cannot be said to be representative, and the findings cannot be generalised across the state. The sample does, however, provide rich data on which to develop teacher training and developmental strategies for the future of the study of textiles in NSW secondary schools.

3.4.1 Description of background information
There was a good blend from schools all over the state with representation from each of the Catholic Dioceses and each of the regional areas that agreed to participate.
From these forty schools I received 58 textile teacher surveys and 40 head teacher surveys. There were only five responses from male technology head teachers. There are two possible explanations for the limited response from male head teachers. First, it may be the case that textiles and design is more likely to be offered in schools if the head teacher of technology has an interest in textiles or a home economics background. Second, as the head teacher surveys were for head teachers in Technology it is understood that not all head teachers would see the relevance or importance of the study, especially if they had an industrial arts background. This may indicate that the Principal’s consent could have been influenced by the Technology Head teachers willingness to participate in the study. The only way to check if the missing schools were predominantly of technology head teachers with an industrial arts background would be to telephone all the possible responding schools to obtain a tally of industrial arts backgrounds and home economics backgrounds among head teachers.

A reminder facsimile was sent to all school Principals thanking those who had responded and reminding those who had not sent in approvals. As a result of the reminder facsimile a total of thirty-five government school principals, eight Catholic college principals and two Independent High School principals approved the study. As a data set this represented 29.8% of the possible response and the balance of 18:4:1 differed from the true ratio of 12:2:1 Government schools: Catholic Schools: Independent schools. The sample therefore has a bias, with double the proportion of Catholic Schools represented. This may be explained by the fact that I have been a lecturer at Australian Catholic University for over twelve years and am probably better supported in this sector than the others. There was a good blend of schools all over the state, with representation from each of the Catholic Dioceses and each of the regional areas. If the principals had checked with the Head Teachers of Technology before approving, it is possible that not all Head Teachers would see the relevance or importance of the study if they were more philosophically oriented to design and technology or industrial arts. There were only five responses from male head teachers. There was no preparation in the design of the study to identify the representative nature of this statistic. The representative nature of this finding could only be possible if all schools were contacted by telephone to ask the background and gender of the head teacher of technology. The gender and background of head teachers is a sensitive
issue in design and technology (Cunningham, 1993b) and permission was not obtained to make this cross reference. It was interesting to note that not all head teachers responding were from home economics or an industrial arts background. Some had a visual arts background.

From the 45 participating schools I received 45 head teacher surveys and 57 initial textile teacher surveys. Of those 57 teachers, 25 agreed to participate further with extended response surveys and interviews. Of those 25 teachers nominating for further participation in the initial survey, 17 returned the extended response survey and seven were chosen to be interviewed on the basis of these responses. The seven were chosen from different areas in the state and different types of schools.

There were 267 student surveys returned, representing 16.5% of the students enrolled for HSC Textiles and Design. The proportion of males in the survey was similar to the 2% of males represented in the Textiles and Design candidature. Responses were received from five males. More support for the choice of a year 11 cohort came in discussion with teachers. It was found that quite often schools manage to get a year 11 Textiles and Design class but when numbers drop off and there are not sufficient students to support a Year 12 class the remaining students enrol with Distance Education. The numbers appear to vary more in enrolment from year 11 to year 12 in lower socio-economic areas where there is less expectation that the students will attend university. Textiles may also be considered an easy option for students not sure about their future or for those who are less academically inclined. These students are more likely to leave school without completing their Higher School Certificate.

In phase two of the study permission was obtained to survey the first student teachers to participate in the joint Whitehouse Institute and Southern Cross University teaching degree for Design and Technology Teachers specialising in Textiles and Design (n=3) and the third and fourth year students in Australian Catholic University Bachelor of Teaching / Bachelor of Arts – Technology specialising in food and textiles (n=30).
3.4.2 General description of respondents
All the secondary students surveyed were invited to participate in the study by their textiles teacher. The majority of the secondary students surveyed were female and currently enrolled in the preliminary HSC Textiles and Design course. The textiles teachers surveyed were currently teaching textiles and design in schools. There was limited access to student teachers. Thirty Australian Catholic University students from a possible thirty-two third year and fourth year food and textiles majors in the Bachelor of Teaching/ Bachelor of Arts - Technology students formed the majority of student teachers surveyed. Three of a possible six third year students at Whitehouse School Fashion Diploma, who will be given qualifications to teach under a regional university, completed a survey of open-ended questions. This survey is available in Appendix D. The Whitehouse School of Fashion is new to the technology teacher training arena as is the College of Fine Arts (COFA) of the University of New South Wales. These two institutions represent the shift of emphasis in textiles technology from a textile science focus to the more practical ‘design’ focus of the new textile syllabuses from Stages 4 to 6. It was not possible to access students from Southern Cross University, COFA, Newcastle University, University of Technology Sydney, Wollongong University, or Avondale College. Sydney University is not included in the list of universities offering support for textiles teacher training as they have discontinued their undergraduate program for technology teaching and only offer a small number of places for students studying to gain qualifications to become technology teachers through the Master of Teaching Program. The next section discusses the processes involved in gathering data from Head Teachers Technology, textile teachers and textile students.

3.5 Phase one
3.5.1 Purpose of phase one
The purpose of phase one was to gather quantitative data contributing to the knowledge of the age, gender and length of service of teachers currently teaching textiles and design. It also gathered limited qualitative data to gain a picture of the textiles experiences of both textiles teachers and secondary students and their perception of the value of textiles education.
3.5.2 Instruments used to collect data

Three main factors determined the structure of the survey instruments for this study. First, the research literature revealed limited evidence describing textiles teachers in NSW – their age, gender, qualifications, years to retirement and their perceptions of the value of the study of textiles. Second, there are numerous studies of the value of textiles for the elderly (Schroll, et al, 1993; Reynolds, 2005) the critically ill (Predeger, 1996; Lane, 2005a; Lane, 2005b), children in history (Cavanagh, 2004; Peacock, 1982; Kyle, 1986) and in the arts (Hall, 2004; Mason, 2004) but few, if any, of the value of textiles education to adolescents in contemporary society. Third, students’ and teachers’ perceptions of the value of textiles in secondary schools may be influenced by the cultural influences of home, family and community (Wallace, 1956; Douglas, 1982; Kolbe, 1984).

Mind mapping the issues that have come to light from my reflection of the cultural dynamics of textiles education in secondary schools resulted in Figure 4. It serves as a predictive model of the relationship between participants and the information they will provide that will influence the perceived value of textiles in secondary schools.

![Figure 4 Conceptual Framework of the Value of Textiles Education (VOTE)](image)

Dunkin and Biddle (1974) argue that in formal education programs, the background and demographic characteristics that both learners and the educator bring into the classroom influence the teaching and learning process. The first phase of the study
uses an adaptation of a model of the study of classroom teaching proposed by Dunkin and Biddle (1974). It provides a holistic picture of teaching variables (p. 38). The variables have been modified to provide a clearer picture of the influences on the value of what is taught in the textiles classroom. The major elements are presented as Presage Variables relating to the teacher; the Context Variables relating to the student and the school/community; Process Variables relating to the classroom, and Product Variables showing student outcomes. According to Anderson and Burns (1989), the Dunkin and Biddle (1974) model is the best known of all models that exist for educational research (1989, p. 31). The model is not an explanation for student learning or for teacher-student interaction. It is a model for research into teaching that identifies classes of variables to study. Table 4 on the following page indicates how the Dunkin and Biddle influenced the survey design.

The model gives valuable insights into the impact of the school and social context on students’ attitude to textiles, and therefore into the value they place on the subject and the value they perceive as coming from the study of textiles.

As the Dunkin and Biddle model (1974) was designed for the observation of teaching and learning in the school environment, the variables were modified to suit this study. In the following table the left column sets out the variables that were suggested by Dunkin and Biddle (1974) and the right column shows how those variables were modified to accommodate variables better measured by mail survey and relevance to this study. Instead of indicating social class, participants were asked to indicate the postcode of home and postcode of the school. This had the purpose of identifying the location of teachers and strong ‘textiles schools’. These variables guided the development of the initial quantitative survey to give detail of the site of research and the characteristics of respondents.
Table 4: The influence of the Dunkin & Biddle Model on survey design.

<table>
<thead>
<tr>
<th>Dunkin and Biddle Model</th>
<th>Value of Textiles Survey Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher formative Experiences</strong></td>
<td></td>
</tr>
<tr>
<td>Social class</td>
<td>Home Postcode &amp; School Postcode</td>
</tr>
<tr>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td>Sex</td>
<td>Gender</td>
</tr>
<tr>
<td><strong>Teacher Training Experience</strong></td>
<td></td>
</tr>
<tr>
<td>University attended</td>
<td>Training &amp; Qualifications</td>
</tr>
<tr>
<td>Training Program</td>
<td>Work other than classroom teaching</td>
</tr>
<tr>
<td>Teaching experience</td>
<td>Years of service – full time / part time</td>
</tr>
<tr>
<td><strong>Teacher Properties</strong></td>
<td></td>
</tr>
<tr>
<td>Teaching skills</td>
<td>Teaching subjects in school</td>
</tr>
<tr>
<td>Intelligence</td>
<td>Textile interests outside school with family, friends and colleagues/instructors</td>
</tr>
<tr>
<td>Motivations</td>
<td>Professional Association membership</td>
</tr>
<tr>
<td>Personality traits</td>
<td></td>
</tr>
<tr>
<td><strong>Pupil Formative Experiences</strong></td>
<td></td>
</tr>
<tr>
<td>Social class</td>
<td>School postcode</td>
</tr>
<tr>
<td>Age</td>
<td>Age</td>
</tr>
<tr>
<td>sex</td>
<td>gender</td>
</tr>
<tr>
<td><strong>Pupil Properties</strong></td>
<td></td>
</tr>
<tr>
<td>Abilities</td>
<td>School experiences</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Textiles interests outside school with family, friends and colleagues/instructors</td>
</tr>
<tr>
<td>attitudes</td>
<td></td>
</tr>
<tr>
<td><strong>School and Community context</strong></td>
<td></td>
</tr>
<tr>
<td>Climate</td>
<td>No. teachers on the Technology Staff</td>
</tr>
<tr>
<td>Ethnic composition</td>
<td>No. teachers (NT) teaching textiles</td>
</tr>
<tr>
<td>Bussing</td>
<td>NT capable of teaching textiles</td>
</tr>
<tr>
<td>School size</td>
<td>No. of textiles classes offered and the class year they are offered to</td>
</tr>
<tr>
<td>Class size</td>
<td>No. of students in each class</td>
</tr>
</tbody>
</table>

The textiles teachers and students were also asked to comment on the availability of materials for textiles projects in their area. This information was then cross checked against the numbers of students enrolled in HSC Textiles and Design to identify if the availability of textiles materials had any correlation to the number of students.
studying textiles in the areas of better provision. A Likert scale was used for both responses on variety of materials and on the quality of materials. There are several reasons for using Likert scales. First, these scales have been found to communicate interval properties to the respondent, and therefore produce data that can be assumed to be intervally scaled (Madsen 1989; Schertzer & Kernan 1985). The intention is to identify any relationship between the availability of textiles in an area and the strength of textiles in the schools in the area. The response was set out on a Likert scale to limit the range of responses for more manageable interpretation. The structure of the question follows.

How would you describe the **variety** of materials available for textile projects in your area?

Excellent  good  fair  poor  not sure

How would you describe the **quality** of materials available for textile projects in your area?

Excellent  good  fair  poor  not sure

The head teacher survey contributed the data regarding support for textile education in schools. The structure of the questions relevant to the school context follows.

How many teachers are on the technology staff? Full-time ___ Part-time ____

How many teachers on your staff are capable of teaching Textiles
Years 7-8 _____  Years 9-10 _____  Years 11&12 _____

How many teachers on your staff are willing to teach Textiles
Years 7-8 _____  Years 9-10 _____  Years 11&12 _____

If textiles is not offered in a particular year group it is most likely because

- There is limited demand from the students
- The staff are not interested in teaching the subject
- The staff are not available to teach textiles

There was also a common item given to head teachers, textiles teachers and students. The item given was “Please give your perspectives (in point form) of the value of textiles in secondary schools.” The question did not make any reference to the definition of the ‘value of textiles’ which referred to the benefits of the subject in the school, how important it was in the school, and how beneficial the subject is to individual students within the school. The intention was not to lead the response and sufficient space was allowed for considered opinion (Denscombe, 2003). This
question identified quite clearly those who were passionate about the study of textiles and those who did not value the subject on any level.

3.5.3 Explanation of data analysis
Probability sampling has set the standard for social research but qualitative samples tend to be purposive rather than random (Kuzel, 1992; Morse, 1989). As it was my intention to use the survey as a preparation of a more qualitative approach to the study the sample responding represented those who had an interest in the study. As the pool from which the sample could be drawn was already small, random sampling of that group can also produce bias (Miles & Huberman, 1994, p. 27). According to Miles and Huberman (1994) sampling in qualitative research involves two actions 1) the setting of boundaries and 2) a frame to uncover, confirm and qualify the basic processes or constructs that support the study (p. 28). The frame required representation from Government, Catholic and Independent schools from across a broad cross-section of the state. For this study the boundaries were set on schools in NSW offering Textiles and Design for year 11 in 2003. This information was gained from The NSW Board of Studies. The list included schools that had not been listed in the Higher School Certificate data in the previous year.

The addresses of the schools were obtained by purchasing the file on all secondary schools in NSW from The Board of Studies. This file was emailed in an xls file format. The file included telephone and facsimile numbers that were valuable in follow-up to the schools. The All Schools file was then used with the Board of Studies Textiles and Design Year 11, 2003 enrolment details, also emailed in xls file format. This created a file that could then be used to post out requests to school principals to participate in the study. Having the school addresses in this format made it easy to create a mail merge for the follow-up facsimiles.

Three different surveys (Appendix B1, B2 & B3) for the head teacher, textile teachers and senior textiles students were sent out with the Principal’s consent letter. The teacher consent letter and the Student Carer consent letter were also included (Appendix B4 & B5). The survey kit included one head teacher survey, 3 textile teacher surveys and consent letters, and 10 student surveys and consent letters. The teacher consent letters also invited participation in an in-depth interview that would be
conducted at their convenience. Those wishing to participate gave their names and preferred contact details either by telephone or email. The schools organised the completion of consent forms and surveys and returned them to The Australian Catholic University locked bag address. Timelines of access, negotiation, and collection of data will be found in Appendix A. The first survey kits were sent in November 2004, as soon as approval was gained from the relevant authorities. Survey kits were sent to government schools in January 2005 with those for the remaining Catholic Schools.

Preliminary data collections and recording from February to May informed the preparation of the in-depth teacher survey and interview questions. In June 2005 a facsimile was sent out to thank the schools that had responded and to remind the schools that had not responded. The facsimiles sent to the schools that had not responded included the original letter to the Principal and a full set of the surveys and consent forms. Data was collected until the end of July, 2005 and a complete analysis of the quantitative data was commenced in August, 2005.

A spreadsheet was set up to collate the results of the survey questions for each group – head teacher, textiles teacher and textiles students. As the responses were of both quantitative and qualitative nature, the quantitative data on the presage variables – postcode, age, gender, years of service, training and qualifications, work other than classroom teaching and their teaching subject - were coded and put into spreadsheet format. The codes assigned to ‘qualifications’ and ‘other work’ can be found in Appendix E.

The context variables that appeared on the second page of the survey were entered into a second spreadsheet document which included how textiles was offered – in design and technology or in textile elective subjects - the numbers in the classes and the number of teachers who were qualified and willing to teach each year group. Similarly the textile teacher presage variables – postcode, age, gender, years of service, training and qualifications, work other than classroom teaching and their teaching subjects - were coded in the same way as the Head teacher responses and were organised into spreadsheet format. The additional presage variables were seen as important to the study. The additional postcode for home was included to identify the
distribution of teachers as well as where they teach and the variable of intended future service was included.

There was only one context variable that I considered important to the textile teacher that was not already answered by the head teacher, and that was regarding perceived quality and variety of textiles products available for use in textile and design projects. This response was tabulated with the postcode so that it could be matched against the region to identify, if any, a relationship between the availability of textiles materials and the popularity of the subject in a particular region. The student context variables of postcode, gender and school year were entered in spreadsheet format with their career choices and whether or not they were interested in teaching textiles.

**Computer Analysis**

The next step was to analyse transcribed material using the computer software program NUDIST*Vivo (N*Vivo), which has been developed by Richards and Richards (1991). N*Vivo facilitates the storage of data, coding and retrieval of material, and conceptual analysis using a grounded theory paradigm (Richards and Richards 1991, p. 38). I attended three two-day workshops, and a single day seminar, on using the N*Vivo software program, in order to develop expertise and comfort with the program. I used N*Vivo as at the time it was the latest development in computer software programs for qualitative research, and in my experience was more logically organised and user-friendly than similar programs such as Ethnograph. Dr Pat Bazeley, the workshop facilitator, provided all workshop participants with a user manual she had developed. The software developers have established email and website addresses, to allow consultation on the application of the program. A workbook and update of the program was available for downloading from the website (www.qsr-software.nvivo.update.install).

Using this program, data was coded and organised into categories to identify connections and generate theory to explain the patterning of data. The open ended responses were recoded in word documents for each student and saved in rich text format to be used for analysis in N*Vivo. Responses to the final question on the survey that were common to all three surveys in phase 1 and qualitative in nature were entered into a word document and saved in rich text format for analysis in the
data analysis software N*Vivo. For each group, responses were entered into one document by auto coding, formatted with a heading for each respondent. By keeping the group responses separate it was possible to identify the themes that were important to each group and then identify the similarities and differences in perceptions of the value of textiles.

All the demographic and other quantitative data from the initial surveys were entered into spreadsheet software to be used as document attributes for the qualitative data analysis software N*Vivo. There was a file created for Head Teachers, textiles teachers, student teachers and textile school students. Each was saved as a delimited text file and imported through the document attributes function of the N*Vivo software. This then formed the basis on which matrix intersections could be formed with the coded qualitative data.

The responses were coded for popular themes particularly around reports of skill development, opportunities for future employment, personal development and creativity. Matrix intersections were formed to identify the differences and similarities between Head teachers, textile teachers and textiles students in their perceptions of the value of textiles. This was checked against the conceptual framework of factors influencing the value of textiles (Figure 6). The coded data was analysed from a qualitative perspective and then quantified for export back to spreadsheet for tabulation and summarizing the predominant values identified by each group. This analysis only involved the groups that had a direct relationship and therefore the student teachers were not included in this analysis and nor were they specifically asked their impressions of the value of textiles, though this unexpectedly, came through in answers to other questions.

Using the qualitative data on students’ textiles experience, it was possible to identify how textiles experience outside the classroom impacted on the student perspectives of the textiles experiences in schools and how that impacts on their perception of the value of textiles in school. It was also possible to identify any relationship between perspectives on the value of textiles and the consideration of becoming a textiles teacher. Using the quantitative attributes of postcode it was possible to suggest the areas that may be most likely to have textile teachers available in the future.
3.5.4 Summary of phase one
The process of data collection obtained responses regarding the textiles experiences of textiles teachers, secondary textiles students and the head teachers of technology. The survey instruments were valuable in gathering demographic data on the students and teachers, quantitative data on the teaching experience and their potential future teaching experience and limited qualitative data on their perceptions of the value of textiles education in secondary schools.

3.6 Phase two

3.6.1 Purpose of phase two
Phase two of the study provided an opportunity to enrich the data gathered in phase one and gain depth of understanding into the themes that emerged from the data collected in phase one.

3.6.2 Instruments used to collect data
At the bottom of the teacher consent form the teacher could nominate for a further questionnaire and interview. The extended response questionnaire (Appendix C1) and questions for the interview (Appendix C2) were a response to data collected in phase one and provided more detail on the perceptions of what constituted an effective textiles teacher and gave some further insights into how the interest in teaching textiles develops and is sustained. The students gave a strong impression that their enjoyment of the subject and the value they put on the subject were closely related to the nature and performance of the teacher. This is of course not surprising as it is in keeping with the Australian Government Quality Teacher Program Newsletter of June 2004 indicating that research suggests (Hattie, 2003; Cuttance & Owen 2001) that teachers make a difference. The interview questions, therefore included a question regarding the teachers knowledge of the NSW Model of Pedagogy (NSW DET, 2003).

Telephone calls were made to those teachers who volunteered their telephone numbers for the second phase of the study. Those preferring to be contacted by email were contacted by that method. It was important that the teachers interviewed were from different school systems, different areas in the state and of different age groups. This was not for comparison purposes, but rather to obtain as diverse perspectives as were possible from the sample. The interviews were conducted in association with seminars on Innovative Textiles conducted in different regions around the state. In
this way it was possible to position the interview respondent in the context of the area in which they were situated. It also provided the opportunity to open communication channels with teachers across the state and learn of any common problems regarding the value of textiles education in the schools. Extended response surveys and interview questions can be found in Appendix C1 and C2. The interview questions were used as a guide for a semi-structured interview to allow the interview to flow and to give the teacher every opportunity to contribute to the knowledge of the value of textiles and the training for future secondary textiles teachers. The interview questions were trialled before they were used on the phase 2 participants. The interviews to be included in the study were recorded, with ethics approval, with full knowledge of the participant. I transcribed the teacher responses to interview questions as soon as was possible after interview.

The teachers initially chosen to be interviewed were selected from 17 teachers who agreed to fill in the extended response questionnaire and nominated for interview. The responses to the questionnaires were transcribed as they arrived either by facsimile, email or by post. Using the presage variables, six of these were chosen for interview. This was done to make the most use of the varieties of background and the location of their teaching. The interviews were organised at the teachers’ convenience. Some teachers preferred to be visited at their school, others preferred a telephone interview and others made themselves available after the Textiles Innovation seminars I offered in different areas of the state. The interviews were tape recorded with the participants consent and lasted approximately 30 – 45 minutes. Six teachers were interviewed. Four of the teachers were experienced teachers that had successful students in the HSC Textiles and Design Examination. The other two teachers were younger teachers with different backgrounds that would like to be able to teach HSC Textiles and Design students in the future. The choice of interviewees in a multi-case sampling, as Miles and Huberman (1992) suggest, needs an explicit sampling frame and thought through carefully (p. 29). The question of how many cases was determined by the sampling frame to give confidence in analytic generalisation. It was also recommended that more than fifteen cases can become ‘unwieldy.’ Qualitative studies call for continuous refocusing and redrawing of study parameters during fieldwork, but some initial selection is still required (p. 30).
The initial teachers interviewed were the experienced teachers. They were from each age group defined in the initial survey except for the over 60 age group. One was from the 51-60 years age group; two from the 41-50 years age group (one a head teacher who taught textiles the other an assisting textiles teacher); and one from 31-40 years group, all female, three were from country areas and two from different metropolitan areas. One was from a Girl’s Independent school, one was from an all girls Catholic Colleges and two were from government schools (one selective metropolitan girls’, and one co-educational country school). Two were from home economics training, one was from Design and Technology training and one was from Fashion TAFE training. There is a bias toward the country schools as the teacher shortages are greatest in the country areas. It is important to develop strategies to best support the country schools.

**Description of experienced teachers**
The majority of the teachers in this category are Home Economics trained as they were seen as those best representing the most prevalent teachers of senior textiles in secondary schools over the last 20 years. A valuable contribution was made by fashion teachers displaced by changes in the TAFE system and subsequently employed by the secondary schools system. As the formal training for secondary textiles teachers is now under Design and Technology it was important to include one of the most experienced of these graduates in the sample interviewed. It was also important to cover the range of educational systems and regions in NSW. It is acknowledged that these teachers can not be considered representative of the areas they are teaching in but their inclusion provides an opportunity to gather a variety of opinions. These teachers were chosen from those who agreed to a further interview on the initial consent form. The choice of these teachers was a combination of familiarity with the teachers work and identification across as wide a cross-section in age, region and background as possible.

1. 51-60yrs, selective high school, Met East, home economics trained.
2. 41-50yrs, head teacher, co-educational senior college, North Coast, TAFE fashion background.
3. 41-50yrs, co-ed government school, North West Region, home economics background.
4. 31-40yrs, independent girls school, Northern Metropolitan area, design and technology background

**Description of inexperienced teachers**

Throughout the study it became increasingly obvious that the younger less experienced teachers had a valuable contribution to make to the study. Initially my perception was that the future of textiles in NSW secondary schools hinged on the contribution the longer standing teachers could make before retirement. Comments by the experienced teachers and comments by inexperienced teachers at professional association meetings caused quite a change in this perspective and so the contribution of these inexperienced teachers was noted.

5. 21-30 yrs, Co-ed government junior high school, Central Coast Region, Design and Technology majoring in Food and Wood technology

6. 21-30 yrs, Co-educational catholic school, North Western Metropolitan, retrainee from hospitality background

The teachers names were not identified in the interview transcript; but by a general description of the school and region in which the teacher was located, coded for identification by the researcher as indicated above.

**3.6.3 Explanation of data analysis**

The interviews were transcribed and analysed using the N*Vivo analysis software to code the comments under the themes that developed from the initial and consequential extended response surveys in a similar manner as described in detail in phase one.

**3.6.4 Summary of phase two**

Teachers nominated themselves for the extended response questions by completing the expression on interest at the end of the initial survey. The answers to the extended response questions and the demographic information on the teachers determined the teachers that were to be interviewed. This was to gain a wider breadth of opinion to inform the questions

**3.7 Phase 3**

**3.7.1 Purpose of phase three**

Survey data obtained from student teachers were to provide knowledge of the future of textiles education. As there is no longer training available for the preparation of specialist textiles teachers there was a need to identify the intention of technology student teachers to support the teaching of textiles in secondary schools. As student
teachers are in a unique position to align their thoughts with both the needs of students and the challenges of teaching, their perceptions of the contribution textiles education makes in the secondary classroom provides a valuable dimension to the study.

3.7.2 Instruments used to collect data
The extended response teacher survey was modified for the student teachers’ questionnaire in the light of the teacher responses. To inform the question of quality of textiles teachers, the teachers and the students were given similar questions. The third and fourth year technology students specialising in food and textiles studies were chosen for the study as they had participated in teaching practicum and could give their opinion on the facilities they experienced in the schools and their perceptions of the support for textiles education in the school. The third year students had completed all their textiles academic studies and the curriculum units but had not had as extensive experience in a teaching role in schools as the fourth year students. By using a similar survey instrument with student teachers as with textiles teachers consistencies and differences in standards, and expectations and perceptions of preparedness to teach textiles in secondary schools, could be identified in analysis. This information in turn informs issues to be addressed in teacher training. The student teacher survey can be found in Appendix D.

3.7.3 Explanation of data analysis
The data were transcribed into word files that allowed coding by the question in N*Vivo. By setting up a template file in word the data from each survey could be entered with a unique number. All the responses to each question could be grouped together to identify common themes forming in the data. The identified themes could then be matched against those expressed through the teacher and student survey data as well as the themes developed in the teacher interviews.

As a means of investigating the argument put forward by head teachers and textiles teachers in phase one of the study, that textiles education is linked to improved student outcomes, the quantified themes of the value of textiles are checked against The NSW model of pedagogy presented in the Quality teaching in New South Wales public schools: Discussion paper (NSW Department of Education and Training [DET], 2003) There are three dimensions in the model and six elements for each dimension as indicated in the following table.
The NSW Model of Pedagogy (NSW DET, 2003) outlines the three dimensions that represent classroom practices that have been linked to improved student outcomes. These dimensions are used to assess the value of the pedagogy used in the textiles curriculum in NSW secondary schools. For each of the dimensions there are six elements that are matched to the responses of head teachers, textiles teachers and students on the question of the value of textiles education in secondary schools. The three dimensions are intellectual quality, quality learning environment, and significance. Intellectual quality refers to pedagogy focused on producing deep understanding of important, substantive concepts, skills, and ideas. Pedagogy that establishes a high quality learning environment refers to pedagogy that creates classrooms where students and teachers work productively in an environment clearly focused on learning. Such pedagogy sets high explicit expectations and develops positive relationships between teachers and students and among students. Pedagogy that generates significance refers to pedagogy that helps make learning more meaningful and important to students. Such pedagogy draws clear connections with students’ prior knowledge and identities, with contexts outside the classroom, and with multiple ways of knowing or cultural perspectives.

### 3.7.4 Summary
Phase three made use of the student teachers’ perceptions of textiles education in secondary schools. Their observations contribute to the vision of the possible future of textiles education as well as providing a range of perspectives from that of students to the responsibilities and challenges of teachers.
3.8 Limitations
As the response rate could not be considered representative of the population of Technology Head Teachers, textile teachers and students, the study is descriptive, and though important in starting a dialogue in the area of textiles education in NSW, cannot be generalised across the state. The impact of social class on the perception of the value of textiles education is not without relevance yet is outside the parameters of the study. By identifying the strength of textiles education in different regions, the impact of social class may be included as a concern for future research.

It was not possible in the design of the research to assess the knowledge and abilities of the students effectively, yet by enquiring into their experiences in textiles with family and friends and within the school setting it was possible to provide a profile that may impact on their attitude to the value of textiles. Therefore in the Dunkin and Biddle model (1974) ‘abilities’ and ‘knowledge’ were replaced by ‘experiences.’

It is difficult to ascertain whether the schools that do not offer textiles do not value the subject or whether traditionally the school has not been set up to deliver such a program. This is outside the parameters of the study as the data set used for the study only includes schools that offered Textiles and Design in Year 11 in 2003.

3.9 Chapter summary and conclusion
The methodology was designed to draw data from all those who contribute to the valuing of textiles education in secondary schools and possibly the future of textiles education. The three phases of data collection build on each other to develop a rigorous purposeful study. The findings of the study are presented in the following chapter and discussed in chapter 5.
CHAPTER 4
SELECTED FINDINGS

4.1 Introduction
This chapter presents the data collected from the head teacher, secondary textile student, student teacher and textile teacher surveys. The survey data is followed by the information gathered in the teacher interviews to further enrich the survey data. The method of data collection has been detailed in Chapter 3. The different perspectives of each group contribute breadth and depth of understanding to the current perceptions of textiles education in secondary schools. The data were further enriched with the teacher interviews. The data informs the conceptual framework of the possible factors that influence the perceptions of the valuing of textiles in secondary schools. The chapter is concluded with evidence of the textile teacher training provision in NSW to address the question: Are there textiles teachers of sufficient quantity and quality being trained for and retained in secondary schools in NSW to ensure the continuance of the stages of textile education’s ‘revitalisation movement’ beyond 2010?

4.2 Response rates
The condition for access was inclusion of a request for approval to be given by the Principal for each school. I received approval from fifteen Principals two weeks after the letters were sent out. A reminder facsimile was sent to all school Principals thanking those who had responded and reminding those who had not sent in approvals. As a result of the reminder facsimile a total of thirty-five government school principals, eight Catholic college principals and two Independent High School principals approved the study. As a data set this represented 29.8% of the possible response and the balance of 18:4:1 differed from the true ratio of 12:2:1 Government schools: Catholic Schools: Independent schools. The sample therefore has a bias, with double the proportion of Catholic Schools represented. This may be explained by the fact that I have been a lecturer at Australian Catholic University for over twelve years and am probably better supported in this sector than the others. There was a good blend of schools all over the state, with representation from each of the Catholic Dioceses and each of the regional areas. If the principals had checked with the head teachers of technology before approving, it is possible that not all head teachers would
see the relevance or importance of the study if they were more philosophically oriented to design and technology or industrial arts.

**Head teachers**

There were only five responses from male head teachers. There was no preparation in the design of the study to identify the representative nature of this statistic. The representative nature of this finding could only be possible if all schools were contacted by telephone to ask the background and gender of the head teacher of technology. The gender and background of head teachers is a sensitive issue in design and technology (Cunningham, 1993b) and permission was not obtained to make this cross reference. It was interesting to note that not all head teachers responding were from home economics or an industrial arts background. Some had a visual arts background. From the 45 participating schools I received 45 head teacher surveys.

**Textile teachers**

Initially 57 textile teacher surveys. Of those 57 teachers, 25 agreed to participate further with extended response surveys and interviews. Of those 25 teachers nominating for further participation in the initial survey, 17 returned the extended response survey and six were chosen to be interviewed on the basis of these responses. The six were chosen from different areas in the state and different types of schools.

**Textile secondary students**

There were 267 student surveys returned, representing 16.5% of the students enrolled for HSC Textiles and Design. The proportion of males in the survey was similar to the 2% of males represented in the Textiles and Design candidature. Responses were received from five males. More support for the choice of a year 11 cohort came in discussion with teachers. It was found that quite often schools manage to get a year 11 Textiles and Design class but when numbers drop off and there are not sufficient students to support a Year 12 class the remaining students enrol with Distance Education. The numbers appear to vary more in enrolment from year 11 to year 12 in lower socio-economic areas where there is less expectation that the students will attend university. Textiles may also be considered an easy option for students not sure about their future or for those who are less academically inclined. These students are more likely to leave school without completing their Higher School Certificate.

**Student teachers**

In phase two of the study permission was obtained to survey the first student teachers to participate in the joint Whitehouse Institute and Southern Cross University
teaching degree for Design and Technology Teachers specialising in Textiles and Design (n=3) and the third and fourth year students in Australian Catholic University Bachelor of Teaching / Bachelor of Arts – Technology specialising in food and textiles (n=30).

4.3 Key Findings
In mapping the data collected, a model was constructed to investigate possible factors that shape the valuing of textiles education (VOTE) in secondary schools. The data covered details of the characteristics of the head teachers of technology, textile teachers and teacher training, textiles students and their parental and peer influence on their textiles experience, the school community. The student teachers provided insights into the departments offering textiles in the schools and their intended contribution to the future of textiles education in secondary schools.

4.3.1 Head teachers
Responses were received from 45 head teachers with a predominantly home economics background (n=30) of an average age in the 41-50 year range. Two head teachers had a Fashion Certificate: one in addition to her Diploma in Teaching Home Economics, the other with TAFE teaching qualifications. Five head teachers reported qualifications in industrial arts teaching, three with a Bachelor of Science, two in Visual Arts Education and one in Physical Education. Table 6 outlines the quantitative data regarding the head teacher demographics and their departments.
related to the teaching of textiles. The top row categorises the background of the head teachers as home economics, fashion, industrial arts, design and technology or other.

<table>
<thead>
<tr>
<th>Qual / Background</th>
<th>H. Ec</th>
<th>Fashion</th>
<th>IA</th>
<th>D&amp;T</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>30</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 31-40 years</td>
<td>11</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>41-50 years</td>
<td>19</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>51-60 years</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Over 60 years</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching HSC T&amp;D</td>
<td>19</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Av. Numbers in Textile Classes (all yr groups)</td>
<td>13.5</td>
<td>18.67</td>
<td>9.91</td>
<td>19.25 (D&amp;T)</td>
<td>14.75</td>
</tr>
<tr>
<td>Av. No. teachers willing to teach textiles</td>
<td>2.9</td>
<td>2</td>
<td>2.75</td>
<td>3</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Of the schools surveyed, the one that had the most textiles classes and students per year group was in a technology department of nine technology teachers; four are qualified to teach Stage 6 Textiles and Design and two are willing to teach textiles and design. The department is headed by a female teacher with a Bachelor of Science background, aged 31-40 years, with 5-10 years of service. All year 7 students were reported to do some textiles. There were 50 students in year 9, 48 students in year 10, 18 students in year 11 and 13 students in year 12 (av. 32.25 students/year group).

The largest technology department, with eleven teachers and three willing to teach Stage 6 Textiles and Design, had a home economics trained teacher in the 41-50 year age group who also teaches textile arts outside of school teaching and has an average of 13.75 textiles students per year group. A third head teacher who teaches textile arts outside school had a staff of seven, all willing to teach Stage 6 Textiles and Design with an average number of 25.75 textiles students in each year group. It was anticipated that schools with older home economics trained teachers would be more inclined to have larger numbers in textiles. This was not found to be the case. Departments with younger teachers and teachers with a background in fashion were found to have the larger textiles and design enrolment numbers.

**Qualitative Data**

There were seven prominent themes apparent in the reporting of the value of textiles by the head teachers. They are set out below in order of most reported to least:
1. Head teachers saw textiles as an opportunity for students to use their creativity to produce products that interest them (H02) “Allows students to develop their creativity” (H15). “Like art it is a means of expressing oneself” (H18).

2. Head teachers saw textiles education as an opportunity for skill development through design. Skills listed included the obvious practical skills as well as time management skills; fine motor skills; critical, lateral, and analytical thinking; problem solving, life skills, numeracy, and literacy skills. Skill development was very specifically addressed by the Head teachers and textile teachers compared to the students.

3. Head teachers saw textiles education as a means of developing self-esteem, and a sense of pride and as an opportunity to succeed beyond the classroom. Textile students can enter fashion competitions, participate in textile art exhibitions and create articles for charity groups (e.g., quilts of love) and such activity provides an opportunity to promote the school in the community.

4. Head teachers saw textiles education as a subject that the students regard as being relevant to their everyday lives as consumers and as offering them life-long skills and an opportunity for life-long learning. The subject is relevant to their clothing choices, textiles for the home, work, school, and leisure. Equally important to the head teachers, in their collective view, was the belief that the study of textiles provides insight into the textile and apparel industry, the work of designers and manufacturers, and relevant technologies leading to career opportunities.

5. Head teachers saw textiles education as a subject through which students of all levels of ability can achieve in a supportive environment that encourages collaboration to achieve individual and group goals.

6. Head teachers saw textiles education to be of equal importance in developing a knowledge base, particularly consumer knowledge, and knowledge of cultures and of the historical significance of textiles.

7. Head teachers saw textiles education as a fully rounded subject for the development of head, heart and hands to teach patience and develop a sense of identity through self-expression and leisure activities.

When reflecting on the opportunities textiles education offers as a creative outlet, the comments centred around self-expression and achievement: “Textiles provides students with an opportunity to use their creativity to produce products that interest
them” (H02); “The subject allows for creativity and individualism”(H07); “It is a creative and expressive form of design” (H28).

The predominant group of skills mentioned were life skills. Fifteen of the 51 comments on skill development were specifically related to developing skills for life: “This is a life skill subject as they learn to use the decision making process through designing and manufacturing projects” (H07) “Develop skills for life via understanding textiles technology” (H22) “An asset for ‘life’ after school ie confidence to repair and create with textiles” (H44).

Design skills were the next most commonly mentioned and their comments included the following: “Design skills flow into all aspects of student study life” (H05); “Development of design skills through use of the design process” (H44). Practical skills were mentioned in association with other skills developed; for example: “Valuable subject for teaching practical skills for independent work and self direction” (H32); “Offers problem solving and practical skills valuable for many purposes” (H13). This comment leads into the mention of thinking skills. Most comments were related to problem solving and evaluative thinking skills but there was also mention of “Encourages lateral thinking” (H06) and “Development of critical thinking” (H30). Two Head teachers also commented on how textiles education is “Positively based on the Quality teaching framework” (H24) and “Fits well into quality teaching” (H01), therefore demonstrating the value of textiles education as a curriculum that is structured for enhanced learning.

There were three negative values expressed that were contradicted by counter claims. These negative values were the low status of the subject compared to others in the school; the gender issues, and the cost of providing materials for project work. First the notion that the subject is not regarded as an academic subject (H24) or given the status of other subjects in the school was counteracted by a head teacher from a selective high school who stated that textiles was a “Valuable subject for teaching practical for independent work and self direction” (H32). Yet another head teacher remarked that “Textiles is undergoing a revival at our school it is valued by the staff and students” (H14). It is interesting to note that the number of students taking textiles in the department headed by H14 (a smaller department of four teachers and two
qualified and willing to teach stage 6 textiles) is considerably larger (av. 16.5 students/year group) than that for the department headed by H24 (four teachers qualified and willing to teach textiles and design at stage 6) with an average of 7.5 students/year group. This is an example of how the attitude of the head teacher appears to affect the student numbers. Another example is a head teacher reporting with pride on the contribution textiles makes to the school community when she stated that “Our annual fashion parades are loved and people are amazed at the work completed by the students. 600+ turned up for our 2004 parade” (H18). This school has an average of 15.5 textiles students per year group for a similar number of teachers. This preliminary observation will be explored further in Chapter 6 when analysing possible factors influencing perceptions of the value of textiles education in secondary schools.

Four head teachers commented on gender issues in their expression of the value of textiles education in secondary schools. One head teacher found the “gender perspective disappointing” (H24). To contradict this statement another commented that “female students enjoy a predominantly female group in a classroom” (H26). Two head teachers indicated that textiles education was “Breaking gender bias” (H35) and that there is “No gender bias, both male and female [are] keen to have skills” (H37).

Only one head teacher commented on the opinion that the “cost of textiles is a negative” (H24) and this matter appeared to be a greater concern to the textiles teachers themselves than to head teachers or students. In Chapter 6 the comments regarding the cost of materials will be considered in the light of the region that the participants are from.

Four head teachers intimated that the status value of textiles and design and the contribution of the subject to students were closely related to the quality, skill and motivation of the teachers teaching the subject. One head teacher commented that “Senior students do very well due to the excellent teacher on the senior classes” (H05), and another “If taught properly by motivated teachers who have extended their knowledge in the various aspects then it is worthwhile otherwise the students are turned off” (H18). There were concerns expressed regarding the training of textiles
teachers. “The value is there, but a lot of textiles teachers are basically trained and do not extend themselves” (H18). “As a staff we see a huge problem with university graduates. Most are not trained in textiles (usually food and one other minor). If the subject is to survive it needs to be addressed by the universities more so than the schools” (H32). Considering the conceptual framework the head teachers are alluding to teacher training as a possible factor influencing perceptions of the value of textiles education in secondary schools.

4.3.2 Secondary textiles Students
Forty-four students did not respond to the question on perspectives of the value of textiles in secondary schools. Those who did respond were more focused on knowledge and skill development than were the head teachers and also more focused on the enjoyment value of textiles and the career opportunities it offers. They discussed the development of skills more generally than the head teachers and many implied that the skills were more for the future than for present use. Table 6 on the following page indicates the distribution of student respondents across the state.

<table>
<thead>
<tr>
<th>Region</th>
<th>Female</th>
<th>Male</th>
<th>Yr 9</th>
<th>Yr10</th>
<th>Yr11</th>
<th>Yr12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunter</td>
<td>14</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Met East</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met North</td>
<td>29</td>
<td>1</td>
<td>20</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met North West</td>
<td>27</td>
<td>7</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Met South West</td>
<td>28</td>
<td>20</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Coast</td>
<td>23</td>
<td>6</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North West</td>
<td>29</td>
<td>20</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riverina</td>
<td>32</td>
<td>1</td>
<td>9</td>
<td>18</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>South Coast</td>
<td>23</td>
<td>20</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western</td>
<td>15</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Themes that were unique to the students included their fascination with fashion, the opportunity to do “whatever you like” and the observation that “people show an interest in what you are doing in textiles”.

Only 161 students commented on the value of studying textiles in secondary schools. The response centred around three main themes.

1. Students’ comments indicated that they find the subject *enjoyable*
2. Students’ comments indicated that they find textiles education helpful for future career opportunities.

3. Students’ comments indicated that they consider textiles education valuable as a creative interest.

These themes were expressed by one student as the value of textiles as “Interest, enjoyment, future skills, career decisions, industry” (S97).

The most often-mentioned values were the enjoyment factor and the opportunity toward career development. The percentage of students (12.8%) making comment on the enjoyment factor was higher than that of head teachers (8.1%) or textiles teachers (12%). From their comments it appears that the greatest enjoyment students receive from textiles is in the freedom of choice and the ability to have fun while learning. This is illustrated by comments like “Can design what they want & use the materials they like. To do school yet have fun” (S172) and “Provides a great fun learning experience about fashion etc” (S178). The enjoyment factor mentioned even suggested that students can stay at school through their HSC because of textiles - “I really enjoy textiles. It makes the HSC bearable” (S183) and “The value of textiles especially in senior schools has been huge to me. It is really the only subject that motivates me and that I enjoy” (S184). Similar comments from students at other schools included: “I think the balance in construction and portfolio is good. Favourite subject” (S174). “Not many students do textiles in our school (yr 12) but it is very different from the other subjects. So it is very enjoyable” (S170).

When mentioning the value of the creative interest, students’ comments centred around the practical result of creativity and the association with thinking: “I think high school textiles is important because it makes you think whilst also being productive and creative” (S168). “Shows creative side of student and provides time for experimentation” (S171). Where teachers spoke about creativity as an outlet or expression of emotion, students saw it as being more involved in the creation of an object and problem solving. Their comments regarding self-expression were coded separately, as only one student made the link between self-expression and creativity with the comment “It’s a good idea to learn the basics. People (women especially) should sew to spare money on clothes and provide a creative outlet of individual expression” (S225). When considering the opportunities the study of textiles offers
students preparing for related careers, the students’ comments predominantly referred to awareness of possible careers with comments like “Opens career options for students” (S95) “Many fields to go into” (S72) “Chance to explore different career areas” (S248) and “It gives students an introduction to the textile industry” (S257). Other comments suggested that the skills developed during the course of study could be used in everyday life if not in a career. “Good career, also good as a back up choice” (S212) “Being a life-skill it is very useful for people when they finish school whether it contributes towards their career, everyday mending or even to help the person in buying clothing, non-apparel, furnishing etc” (S191).

**Skill Development**

When students commented on the value of the study of textiles there were general comments regarding the development of skills. As would be expected the head teachers and textiles teachers were more specific about the type of skills that are developed during the study of textiles. The results presented in Table 9 show how the three different groups varied in their perception of the skills attributed to textiles education. The skills that all groups saw as a priority in the study of textiles were firstly life skills (skills that can be used and developed further throughout life) and the practical skills. One student expressed the opinion that it is valuable to learn these skills at school as “Textiles gives you skills that many don’t learn at home. With fewer people learning these valuable skills and not even being able to sew on a button. These will be useful in later years” (S224).

**Table 8 – Perception of skill development attributed by textiles education**

<table>
<thead>
<tr>
<th>Skill Type</th>
<th>Head n=49</th>
<th>Teacher n=58</th>
<th>Student n=161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referred to generally</td>
<td></td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Thinking skills</td>
<td>6</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Practical skills</td>
<td>7</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Fine motor skills</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Numeracy skills</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Design skills</td>
<td>8</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Leisure skills for girls</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Literacy skills</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Life skills</td>
<td>15</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>Time management skills</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Problem solving</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Project management</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Organisational</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The majority of head teachers who mentioned life skills in the value of textiles (N=12) did so more as a value on a list of values with little further explanation except for three head teachers who saw the development of such skills as an “an asset for life” (H44). The respondent also states that textiles education provides “confidence to repair and create with textiles” (H44). Other respondent supporting the notion stated that textiles education “Makes students more self sufficient, keeps alive important life skills” (H15) and “A very important component of the curriculum and young peoples education” (H29). Textiles teachers’ comments around the development of life skills were more in line with the comments of the students that may suggest that the students’ appreciation of the value of textiles as a life skill is as a result of instruction from the teacher. In the following chapter there will be more analysis on the impact of teacher attitude on the attitude of the students.

Textiles Experience in Years 7 and 8
The students’ experience of textiles in years 7 and 8 seemed to have little impact on their decision to choose a career as textiles teachers, as there was a full range of experiences from “no textiles experience,” to “the experience of a disorganised teacher,” to “an enjoyable experience.” The range of comments included “Year 7 and 8 wasn’t enjoyable because our teacher was confusing. We made bags” (S08). “We made a bag. I enjoyed textiles in years 7 and 8. Although the experience of the teacher was not always helpful” (S09). “It was very basic and unorganised” (S100). “I was a terrible sewer in years 7 and 8 and I made an awful pair of boxers and a kimono. I didn’t have my current teacher who is one the better teachers” (S106). “Textiles and Design in years 7 and 8 was very fun. It encouraged me to keep going in this subject. I basically just really enjoyed it!” (S13). “It was fun because it was a break from usual work. It was very simple and there are times that I don’t even remember, but it was good” (S149).

Experience in Years 9 and 10
The survey found that 26.5% of students surveyed did not do textiles in Years 9 and 10. Only 10 stated that it was because the school did not offer textiles as an elective in Years 9 and 10. The majority of experiences were reported to be positive. There were quite a few comments on the quality and experience of the teacher. Some comment that covered the range of responses included: “Made garments of choice, more design work. Inexperienced teacher who didn’t give much guidance so figured things out for
self. But overall good experience” (S10); “Year 9 was my first year of textile and I loved it. Year 10 brought new challenges, especially year 10 fantasy garment. It was hard to fit everything in with the time” (S11); “It was good. Very interesting, lots of fun and fairly good topics” (S100); “It was fun for my first year. I learned the basics then got more skilled as I went” (S102); “Growth of knowledge in these 2 years. Much harder than years 7 & 8, but still great fun! Let me be creative and made me want to continue for years 11 & 12” (S13); “I was attracted to textiles and design, mainly because of the drawings” (S161); “I enjoyed years 9 and 10 more than 7 and 8 as we got to make our own patterns and had more of a say in what you made” (S139) and “Not enough teaching on different techniques of sewing. They could have been very handy. I feel as if sewing was very independent” (S139). One comment that spoke highly of the value of textiles came from a student who didn’t have any other opportunities to learn textiles. She found the study of textiles “Really fun and enjoyable. I wouldn’t have started sewing unless I did textiles, and I really love textiles now” (S176). Chapter 6 follows up data on students who were critical of teachers and those who found their textiles experience boring by cross referencing their perceptions with their experience with families and peers to identify any other possible influences on the perceptions of the value of textiles education.

Class size and the attitude of the students in the class was a concern for some students who made a point of their appreciation of smaller class sizes with comments referring to Years 9 and 10 as having “More theory than 7 and 8, smaller class, more focused, more help and feedback from prac-work” (S12); “Loved it! Making a formal dress was so much fun. We had a small class and we were very productive. We learned a lot of useful textile skills” (S183) and another student found textiles in Years 9 and 10 to be “A lot better because they (the students) took the theory more seriously and we had more freedom.”(S166). In contrast concerns came from students regarding large class sizes with comments like: “Was all right although not enough skills taught and classes were too big, not every student could fit at once on the sewing machines” (S17). The issue of teaching resources and facilities for textiles is extremely important. It was raised by teachers who commented that the classes were not always offered as the facilities were inadequate. One student indicated how some schools overcome the problem of not having enough students to make up a class by the comment: “Didn’t do textiles in year 9 but in year 10 was in a split class 9/10. I didn’t like that though
because there were only 3 year 10 girls” (S215). This issue will be discussed further in Chapter 7 under support for textiles education.

The issue of standards became evident with the range of products produced by the students with some students reporting on making cushions, boxer shorts and stuffed toys in Years 9 and 10 while others reported “An increase in techniques such as embroidery and made more elaborate garments around a theme. We progressed into using a portfolio and the sections became more specific” (S171). The fact that students reported that the study of textiles in Years 9 and 10 was sometimes their first opportunity to study textiles, means that the students do not have the knowledge and skills to build on and are producing projects that would be attempted by Year 7 and 8 students. This problem is even greater if students’ first experience of textiles is in Year 11.

Textiles Experiences with Family
Students who have a rich influence from their family sometimes feel as if it has all been taught to them before as indicated by this comment: “Nearly everything we were taught [in Years 9 and 10] my Mum and Nana and Mum’s friend had taught me” (S208) and another comment “Lots of fun and learn a tonne of things which I have never been taught in school” (S02).

Some experiences were reported as going beyond home sewing with this student’s comment that “Mum used to sew and we go shopping together and talk textiles and go to galleries” (S100). The friendship that textiles fosters between mother and daughter was made more obvious by the comment that; “My mum sews and helps. She is a good mate” (S126). One student reported her father had taught her how to screen print (S138). Other students lamented the fact that they had to rely so much on their mother’s skills (S139), especially as one student’s mother was reported to be “very picky and a perfectionist” (S198). Several students spoke about the inspiration and encouragement they receive from their mothers and grandmothers (S13, S42, S155, S180 and S183).

Profile of a textiles student wanting to be a textiles teacher
Only 24 of the 272 students nominated textiles teaching as a possible career. Only 12 respondents were committed enough to the career choice to give a reason for choosing
textiles teaching as a career. Five of the respondents were interested in becoming a high school teacher and considered Textiles and Design as a subject they liked. Other responses included; “Because the things that I have learnt through school have inspired me to help put back what I got out of school and what I learnt” (S187) with a similar comment from S268. Two students were considering textiles teaching as an expression of creativity (S44, S104). There was a larger positive response to the question of whether they would consider becoming a textiles teacher later in life, with 64 saying they would consider it. There was however a considerable significance in the percentage of students who had textiles experiences at home. Only two of the 24 students considering a career in textiles did not have a textiles experience at home, so 89.5% of students considering a career as a textiles teacher were exposed to textiles experiences in the home. Among the students not choosing to teach textiles as a first career option, 51.4 % had textiles experiences with family members. It is interesting to find that the sewing experiences at home among those not wishing to teach were of professional sewing: family members who are designers and one student who is a daughter of a textiles teacher. This student commented that she may consider teaching later in life but she really wanted a career as a designer (S71).

Every region across the state had at least one student who considered becoming a textiles teacher except for the Hunter region, which had fifteen students as respondents. The percentage of students in the state considering a career as a textiles teacher averaged 7.8%. It was interesting to find that the only student teacher to comment that students had lost interest in textiles was from the only region that did not have one student who would consider a career as a textiles teacher. The highest response came from the Metropolitan North West Region with 14.28%. Metropolitan South West region showed 12.9%, and the Riverina 11.8% of respondents considering a career as a textile teacher. These percentages correspond with some of the highest enrolments in HSC Textiles and Design in 2005. Metropolitan East showed 10% of respondents considering such a career, and responses from the other areas fell below 10%.
Table 9  Regional distribution of students wanting to be textile teachers

<table>
<thead>
<tr>
<th>Region</th>
<th>Respondents</th>
<th>Textile Teaching</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met NW</td>
<td>28</td>
<td>4</td>
<td>14.3</td>
</tr>
<tr>
<td>Met SW</td>
<td>31</td>
<td>4</td>
<td>12.9</td>
</tr>
<tr>
<td>Riverina</td>
<td>34</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td>Met North</td>
<td>50</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>North Coast</td>
<td>23</td>
<td>2</td>
<td>8.7</td>
</tr>
<tr>
<td>South Coast</td>
<td>26</td>
<td>2</td>
<td>7.7</td>
</tr>
<tr>
<td>Met East</td>
<td>10</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>North West</td>
<td>39</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Western</td>
<td>15</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Hunter</td>
<td>15</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Average: 7.9

Perceptions of the variety and quality of textiles available for projects

Textile teachers and secondary Textiles and Design students were questioned on their perceived quality and variety of textiles products available for use in textile and design projects. This response was tabulated with the postcode so that it could be matched against the region to identify, if any, a relationship between the availability of textiles materials and the popularity of the subject in a particular region. The regions that were reported by teachers to have the poorest variety and quality of textiles were the Hunter Region, Metropolitan North Region, North West Region and the Riverina Region. Teachers varied in their assessment of the textiles in their region but the likert scale did not allow for a large range of differences. When the teachers assessment of the textiles available were checked against the percentage of schools offering HSC Textiles and Design for the region there appeared to be very little relationship between them. There may be some relationship between the availability of textiles for design projects and the number of enrolments in HSC Textiles and Design in a region. The highest enrolment figures appear to be in the areas where the textiles variety and quality are better than fair. A North Coast teacher who refused to be fazed by the poor textiles availability in her region stated that “the internet makes everything close” (T29).

Table 12 indicates the perceptions of the variety and quality of textiles by teachers and students in regions compared with the percentage of schools offering textiles and textiles enrolments in 2005 in that region.
Table 10 Perceptions of the variety and quality of textiles in regions

<table>
<thead>
<tr>
<th>Region</th>
<th>% schools offering</th>
<th>T&amp;D Enrol</th>
<th>Variety of Textiles</th>
<th>Quality of Textiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunter</td>
<td>23%</td>
<td>148</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Met East</td>
<td>18%</td>
<td>243</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Met North</td>
<td>32%</td>
<td>189</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Met NW</td>
<td>28%</td>
<td>206</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Met SW</td>
<td>30%</td>
<td>322</td>
<td>2.6</td>
<td>2.4</td>
</tr>
<tr>
<td>North Coast</td>
<td>37%</td>
<td>247</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>North West</td>
<td>24%</td>
<td>51</td>
<td>3.2</td>
<td>3</td>
</tr>
<tr>
<td>South Coast</td>
<td>33%</td>
<td>178</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Riverina</td>
<td>22%</td>
<td>94</td>
<td>3.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Western</td>
<td>33%</td>
<td>73</td>
<td>3.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

In the regions that cover a larger geographical area the variation in opinion was greater as teachers in the same region may be up to three hours away from each other and the nearest fabric shop.

4.3.3 Student teachers

There was limited access to student teachers. The Australian Catholic University food and textiles specialists in the Bachelor of Teaching/ Bachelor of Arts Degree in Technology students (n=29) and Whitehouse School Fashion Diploma students (n=4) who were qualifying to teach under an arrangement with Southern Cross University completed a survey of open–ended questions (Appendix B3). Many of the questions were similar to those given to teachers through the extended response survey (Appendix C1).

Attraction to teaching textiles

The initial question concerned their attraction to teaching textiles with the results showing 29 of the 33 respondents as having an interest in teaching textiles. Three would only teach textiles as a part of the mandatory syllabus, and one was unsure of his or her response.

Students’ main objection to teaching textiles derived from their lack of confidence in their skill level (ST07, ST09, ST13). Some made the comment that they were not interested in teaching textiles before they started their university course but found the textiles experience at university and practice teaching created an interest in textiles for them (ST03, ST04). The late attraction to teaching textiles was also evident in the teacher interviews. Both experienced and inexperienced teachers commented that they
came to love textiles teaching as a result of being forced to teach the subject in schools. Maude in her interview stated “I was thrown in the deep end and told you are going to teach textiles and I said all right... I’ve just loved it ever since.”

**Contribution to school communities as textiles teachers**
The student teachers were generally positive about the contribution they would make to the school community when they start teaching. There were some students (n=9) from both the third year and fourth year group who had not had an opportunity to teach textiles in their practice teaching, and who were either not sure of what they had to contribute or failed to respond to the question. Three students referred to their limited knowledge and skills but were willing to learn (ST01, ST03, ST07). Along similar lines was the student teacher who stated she would contribute “Enthusiasm and a willingness to extend myself” (ST20). Ten students said that they would contribute their enthusiasm and love of textiles. (ST02, 06, 10, 11, 12, 21,23,24, 29 & 32). The mature age students knew the valuable contribution their industry experience would offer (ST08, ST13, ST29). Other students (ST07, 09, 19, 28) were quite positive about the contribution their creativity and knowledge of new ideas could make to the school with comments like “New innovative design projects that relate to what is happening in the world now” (ST31). Students who had come from schools that ran fashion parades (ST24) or went for their internship to schools that had fashion parades, showed that they would be happy to offer that experience in their own schools with comments like “Create the best fashion parade and fund raiser evenings ever!!”(ST32). One student was very proud of the contribution that she had already made to the school that she was assigned to for her internship. “In prac. Year 9 students developed great portfolios. Head teacher was very impressed and showed them to other classes as examples of exceptional work.” (ST18). A student demonstrating dedication to her chosen career commented that she would contribute “devotion to teaching and design” (ST33).

**Textiles interests outside school**
The student teachers’ interest in textiles activities outside school contribute toward their skill development as well as providing them with a past-time that contributes to their wellbeing. It was also found that the students with an interest in textiles also have a greater community engagement. This was evident in the comment stating “I love sewing and making garments for myself. I want to be able to knit better, so I can
knit teddy bears and blankets for hospitals” (ST 11). One other commented on her commitment to making basinet sheets for new babies into the extended family and her involvement in making singlet tops for the local market stalls (ST12). One other spoke of making clothes for friends and family including bridesmaid dresses (ST23). ST 32 had completed an underwear and bra course and made her Godmother’s wedding dress.

But not all the student teachers had an interest in textiles outside school. Four of the student teachers did not respond to the question. These were the four students who said that they did not have any interest in teaching textiles. Three said they had limited or no textile interests outside school. One of those three added “probably should though, to help me” (ST31) realising that working on textiles projects would help in her skill development. I could not say that she was contemplating the value of textiles activities toward her wellbeing. But greater confidence in her skills would give her more peace of mind in her teaching of textiles and as a result strengthen her wellbeing. One other said “My textile interest is developing, I am now starting projects” (ST06). As many of the students had very limited textiles experience before they commenced their teacher training, it is hoped that this development of interest has grown out of her experience of textiles during her teacher training.

Nine students commented that they preferred textile art making and had little to no interest in garment making. Their interests included quilting, home furnishings, jewellery, screen printing, making bags, knitting, crochet and cross-stitch. Eleven students preferred garment making and took a greater interest in fashion. One student teacher’s passion for fashion brought her to state that “In future I would like to have my own fashion label and shop” (ST24). There were really only four students who just loved to sew anything and everything often (ST10, ST21, ST26, ST32).

Gaps in textile teacher training that need to be addressed
Seven students did not answer the question: ‘What gaps do you believe that you have in your training that you would like addressed?’ This is not an indication that they did not feel they had any gaps in their learning, but rather, as one respondent commented, “Too many, textiles industry, innovations” (ST19) that I understood to mean that there are too many gaps in their training to mention. The most common response is
illustrated in the comment “I am not as confident as I would like to be with some of my sewing techniques” (ST30). Twenty of the students would like more time to develop their practical skills. Some students were more specific in the type of skills they would like to develop further. Five students mentioned the need for more pattern making, pattern reading and pattern alterations. One of those students mentioned “Fashion drawing, pattern alterations and innovative techniques. Although I have some skills in these areas I would like more” (ST02).

Another five students said they would like to have had more time during their teacher training to expand their knowledge of textiles. Yet another two wanted more specific scientific knowledge (ST12, ST32). The design and technology teacher training program has to address such a wide area of knowledge that the time allocated for specialisation is very limited. There may be an answer in some of the students’ responses; “there was too much emphasis on major works that did not teach anything other than putting together a portfolio”(ST05); “More prac in learning techniques” (ST27); “Have a step by step approach to teaching textiles e.g., cover the things [that the] mandatory [Technology Syllabus covers in] Years 7 and 8, then in Years 9-10 [in the Textiles Technology Syllabus] and then in Years 11 and 12 [in the HSC Textiles and Design Syllabus] both in theory and in practical skills” (TS07). Although I believe students learn time management skills, problem solving skills as well as practical skills when they complete major projects, students appear to recognise specific learning in structured practical exercises. They also need to know where the skills and knowledge, they develop, fit into the syllabuses that they are going to be teaching.

**Perceptions of the characteristics of an ideal 7-10 textiles teacher**
Comparing the opinion of textile teachers and student teachers on the characteristics of ideal textiles teachers produced some insights from very different perspectives. It was expected that student teachers who had returned from practice teaching experience would have a sense of both the student perspective and that of the teacher. Table 10 on the following page shows the number of times a characteristic of an ideal textile teacher was listed and how the priority emphasis differs from student teacher to teacher.
The characteristics in the first column are arranged as they were quantitatively calculated from the number of times the characteristics were mentioned in the open-ended question for both the student teachers and the textiles teachers in their extended response surveys. Student teachers referred to the importance of being able to relate to the student group more than any other characteristic with 30% of the group listing it in the ideal characteristics. The comments that related to this characteristic included the selection of activities that the students would relate to. “They need to understand that students have different abilities and skills” (ST06). “Breakdown tasks into simple steps” (ST01) and “set standards which they think students can achieve” (ST10).

Table 13 organises the findings into a table that indicates the similarities and differences in among student teachers and textile teachers.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Student Teacher (n=33)</th>
<th>%</th>
<th>Teacher (n=17)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant</td>
<td>11</td>
<td>33.3</td>
<td>5</td>
<td>29.4</td>
</tr>
<tr>
<td>Exciting/interesting</td>
<td>10</td>
<td>30.3</td>
<td>2</td>
<td>11.8</td>
</tr>
<tr>
<td>Knowledgeable</td>
<td>8</td>
<td>24.2</td>
<td>2</td>
<td>11.8</td>
</tr>
<tr>
<td>Skilful</td>
<td>7</td>
<td>21.2</td>
<td>6</td>
<td>35.3</td>
</tr>
<tr>
<td>Supportive</td>
<td>7</td>
<td>21.2</td>
<td>4</td>
<td>23.5</td>
</tr>
<tr>
<td>Motivated</td>
<td>7</td>
<td>21.2</td>
<td>4</td>
<td>23.5</td>
</tr>
<tr>
<td>Passionate</td>
<td>6</td>
<td>18.2</td>
<td>7</td>
<td>41.2</td>
</tr>
<tr>
<td>Likeable/ fun/ approachable</td>
<td>5</td>
<td>15.2</td>
<td>3</td>
<td>17.6</td>
</tr>
<tr>
<td>Creative</td>
<td>4</td>
<td>12.1</td>
<td>5</td>
<td>29.4</td>
</tr>
<tr>
<td>Encourages choice</td>
<td>3</td>
<td>9.1</td>
<td>3</td>
<td>17.6</td>
</tr>
<tr>
<td>Patient</td>
<td>3</td>
<td>9.1</td>
<td>1</td>
<td>5.9</td>
</tr>
<tr>
<td>Fashionable/young</td>
<td>3</td>
<td>9.1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Resourceful</td>
<td>2</td>
<td>6.1</td>
<td>2</td>
<td>11.8</td>
</tr>
<tr>
<td>Displays work</td>
<td>2</td>
<td>6.1</td>
<td>1</td>
<td>5.9</td>
</tr>
<tr>
<td>Effective time managers</td>
<td>0</td>
<td>0.0</td>
<td>4</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Two student teachers had similar comments relating to how the ideal 7-10 textiles teacher would approach the design of learning activities for relevance. They saw it as important that the teacher should be able to “Relate and design projects that reflect fashion trends applicable to teenagers” (ST08). “Also can create interesting assessments and lessons that will encourage and relate to students” (ST13). Another two students wanted to give an example of a project that was no longer relevant or of
interest to the students by stating that the ideal teacher “Has enthusiasm with projects that relate to student interests, not boxer shorts” (ST18) and “creating design projects that students will actually wear and use (not some ugly bag that 40 years ago was fashionable)” (ST31).

Teachers’ comments on relevance were similar in that they addressed the need for relevance, especially in regard to student ability, maintaining interest and providing activities that were achievable. They also mentioned that each learning activity “encourages all students but has the ability to extend the talents that they may not realise they have” (XRT08). This demonstrates a sense of experience and operating beyond satisfactory levels of achievement.

The student teachers’ next most listed characteristics were those of being interesting and exciting. They could see that it was not enough just to have activities that the students could relate to but ones that would excite them. Their ideal teacher “makes fun interactive lessons and relevant interesting lessons” (ST21) “getting the students excited about the subject” (ST20), and is “A teacher who creates a fun interactive environment where the students look forward to the class” (ST03). Only two comments were made by the teachers relating to keeping the students interested by trying to “communicate and encourage an interest in the subject” (XRT07) and suggested that activities “change each term to keep up the pace” (XRT14). It seems that what the student teachers found was that the activities rarely change.

Characteristics of an effective HSC Textiles and Design Teacher
The very different perspectives of the student teachers compared to those of teachers are quite evident from the responses to this question in the survey, yet one characteristic that both groups identified as important was “being encouraging and/or supportive.” One teacher likened the textiles teacher to a sports coach “HSC textiles and design teacher is more like a coach and facilitator when it comes to the students’ MTPs. They have to feel comfortable in that role” (XRT10). The student teachers only used the adjectives “encouraging” and “supportive” or “nurturing” and as one student stated, “someone who genuinely cares” (ST16). As student teachers are still students themselves, the need for these characteristics are very real to them. It may be that the teachers assume these characteristics of all effective teachers. Teachers’
comments that suggested their support was in their description of motivation and enthusiasm.

A characteristic that ranked high on both the student teachers’ and the practising teachers’ list was motivation and/or enthusiasm. There was a slight difference between the two groups in the way this was expressed. The student teachers seemed to focus more on the teachers’ being motivated and enthusiastic about teaching. The teachers, on the other hand put the student into the equation and spoke more about being motivational and enthusing the students and also used words like “tenacious” and “diligent” and the notion that the effective HSC teacher “Brings out the best in students” (XRT16).

The other two characteristics that both groups identified as important were being up to date and innovative. The comments from both groups could even be interchangeable except on the perception of keeping up to date on fashion. The student teachers went so far as to imply that the teacher needs to be “fashionable” with the comment “up to date with the latest fashion” (ST33). The words “fashion” and “trends” were used by the student teachers and not by the teachers. Both groups related being innovative and up-to-date with attitudes to students’ design ideas. The teachers’ comments included the importance of teachers being “Willing to experiment and encourage students to experiment with new materials and methods” (XRT01). “Not afraid to let students try range of products” (XRT05), and “open-minded about student ideas” (XRT16).

The student teachers suggested that the effective HSC teacher should be “innovative. Full of ideas. Open minded” (ST33) and have “Open views about design” (ST23). The first comment seems to continue with the idea that the student teachers believe that all knowledge and inspiration comes from within the teacher. The second comment is more accepting that the students may come up with ideas that may be alien or difficult for the teacher to approve of.

The most common response from the student teachers was that they believed the teacher should be confident about his or her skill and knowledge base. The teachers did not mention this as a characteristic because it may have been an overriding assumption that a teacher would be confident, or, because their top characteristic was
“the need to be resourceful.” The teachers are saying that if you are resourceful and know where to source the knowledge or find an expert who can help, you do not need to know everything.

After returning from practice teaching the student teachers are realising the gaps in their knowledge and many of them agree that they should be gaining their confidence with the junior classes before they attempt to teach an HSC class. As was indicated in earlier questions in the survey, their lack of confidence in their knowledge and skill level may prevent them from trying to teach textiles when they complete their training. Practising teachers know that they can not know everything. As one teacher stated, textile and design teachers “have to have a good knowledge of how to find info. or resources that students will need. You do not have to be an expert in every area of textiles but know where to send the students to get the skills they need.” (XRT10). It is also interesting to find that teachers mentioned the need to continue learning more than did the student teachers. The teachers’ comments were in terms of the need to always want to learn and read more (XRT06) and to learn with the students (XRT 06 and 10). A teacher knows that it does not matter how much you learn at university; the nature of the field of textiles and the breadth of the area will guarantee that there will always be something that you will not know. The only student commenting on the need to continue learning commented on effective teachers’ needing “The ability to learn and teach new upcoming textile techniques” (TS30). The need for teachers to continually update their knowledge and continue to develop their skills needs to be addressed in teacher training. The training universities may have a role in ensuring this ongoing development as was demonstrated in the international internship models (Paine, Pimm, Britton, Raizen & Wilson, 2003). The issue of the need for ongoing training and development will be discussed in Chapter 5.

A summary of the characteristics of the effective HSC teacher identified by both teachers and student teachers are presented in Table 12.
Table 12 Textile teacher / student teacher opinion of characteristics of an effective HSC teacher

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Student Teacher (n=33)</th>
<th>%</th>
<th>Teachers (n=17)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>encouraging/supportive</td>
<td>8</td>
<td>24.2</td>
<td>6</td>
<td>35.2</td>
</tr>
<tr>
<td>motivated/enthusiastic</td>
<td>6</td>
<td>18.2</td>
<td>6</td>
<td>35.2</td>
</tr>
<tr>
<td>innovative</td>
<td>5</td>
<td>15.1</td>
<td>6</td>
<td>35.2</td>
</tr>
<tr>
<td>up to date</td>
<td>6</td>
<td>18.2</td>
<td>4</td>
<td>23.5</td>
</tr>
<tr>
<td>good net worker/resourceful</td>
<td>2</td>
<td>06.0</td>
<td>7</td>
<td>41.1</td>
</tr>
<tr>
<td>generous/hard working</td>
<td>4</td>
<td>12.1</td>
<td>4</td>
<td>23.5</td>
</tr>
<tr>
<td>confident</td>
<td>7</td>
<td>21.2</td>
<td>0</td>
<td>00.0</td>
</tr>
<tr>
<td>patient</td>
<td>3</td>
<td>09.0</td>
<td>4</td>
<td>23.5</td>
</tr>
<tr>
<td>passionate</td>
<td>3</td>
<td>09.0</td>
<td>3</td>
<td>17.6</td>
</tr>
<tr>
<td>creative</td>
<td>2</td>
<td>06.0</td>
<td>1</td>
<td>05.8</td>
</tr>
<tr>
<td>life long learner</td>
<td>1</td>
<td>03.0</td>
<td>3</td>
<td>17.6</td>
</tr>
<tr>
<td>fun</td>
<td>2</td>
<td>06.0</td>
<td>0</td>
<td>00.0</td>
</tr>
</tbody>
</table>

One characteristic of a teacher that has been important to student teachers but was not mentioned by teachers was one who “Knows where to have fun and how to make theory interesting. Bubbly personality” (ST32). Still students themselves, they remain very aware of the need to have fun while learning. “Knowing how to have fun” was a characteristic of effective teachers that featured quite prominently in the responses of the school students thinking of a career as a textiles teacher.

Skills required of an effective HSC Textiles and Design teacher

The student teachers’ role as students was more obvious in their discussion of the skills required of an effective HSC teacher. As with their discussion of knowledge, nine believed that the textiles teacher needs to have highly developed practical skills. They were not always very specific about what these practical skills are, yet they believed that teachers needed to “have lots of practical skills” (ST07). One student teacher commented that teachers should have “Good practical and theoretical knowledge although you can always find someone with necessary skills to assist students” (ST01). This student seemed to be more the exception than the rule in considering sources of support in teaching.

Only four of the teachers listed the need for practical skills in a generic way and five mentioned management and organisational skills. Four student teachers also mentioned the importance of management skills, yet they only listed them as time management and good organisation. The teachers in contrast demonstrated their
experience with comments like “keeping to a time frame and keeping kids on task” (XRT06) and “A drive to help students’ time management” (XRT05). Both groups—both teachers and student teachers, placed a similar weighting on sewing skills, pattern making skills and portfolio and drawing skills. The difference again was in the description of these skills. The teachers listed construction skills, machine embroidery and appliqué (XRT10, XRT04) and a range of textile arts (XRT04, XRT12) and one teacher concluded “students don’t appreciate a teacher who can’t sew” (XRT11). Student teachers were more inclined to state simply “sewing skills” (n=6). Two students stated the need to have construction skills and decorative sewing skills (ST29, ST30).

The importance of people skills appeared to be more evident to the student teachers than to the teachers perhaps again because of the students teachers’ recent experience as students. One insightful teacher commented “Push to have MTP completed without students, teacher and parent stress!!” and “always eat humble pie to get assistance” (XRT14) which also suggests that those people skills come in handy when teachers need to be resourceful in attracting support for their teaching.

In commenting on ICT skills one teacher mentioned the importance of “internet savvy” (XRT04). The student teachers complete more units in computing than in textiles so this is one area where they are particularly strong. In regard to the other skills listed in the table the responses from the teachers and the students could well be interchangeable in their similarity. A summary of the tabulated responses are presented in Table 15.

Table 13 Teacher/student teacher opinion on importance of skills

<table>
<thead>
<tr>
<th>Skills</th>
<th>Teacher (n=17)</th>
<th>Student teacher (n=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>practical skills</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Communication</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>management</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>problem solving</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>people skills</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>ICT Skills</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>sewing</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>pattern making</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>portfolio–drawing</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
The implications of these opinions about required characteristics and skills for the textiles teacher will be discussed in chapter five against the quality teaching standards.

**Strength of Textiles Facilities in Technology Departments**

On the matter of the strength of textiles in the technology departments in schools the study found that there were more schools offering elective textiles courses than schools that did not have facilities for textiles outside the Mandatory 7-10 Technology Course. Twenty of the students reported on schools offering textiles outside the Technology Mandatory Course and thirteen reported no strong textiles facilities. One of these explained, as is expected, that they attended a boys’ school (ST15) but only one student stated that there was no real need for the facilities as “kids have lost interest” (ST31).

Other explanations included a stronger focus on food technology than textiles (ST03, ST30). Five students reported that the teacher ratio for food technology teachers to textiles teachers was approximately 3:1. One student reported a ratio of 7:1 (ST03). This matter will be explored further in the following chapter especially considering what will happen to textiles in those schools when the one remaining teacher retires (ST28). “We had one textiles lady who has been at the school for 20 years and she took all the textile classes within the school (approx 5)” (ST14). The student teachers gave the impression that many of the textiles teachers in the schools were older and lacking enthusiasm. “It could have been improved with younger teachers or teachers more enthused with the design side. Not so mumsy” (ST32).

Another explanation for the lack of textiles included a strong focus on Design and Technology (D&T) with comments like “In D&T textiles, wood/metal/comp teachers were teaching textiles so students were not given a good textiles experience. Students were encouraged to choose other subjects” (ST18) and “Textiles and Design was not encouraged in Year 11 and 12 because the school has a very strong D&T area. They thought that if they offered it in 11&12 the students would stop doing D&T” (ST12). Yet there were also reports of the revival of textiles with reports of new textiles facilities. “Setting up new department for 2006. Have never had textiles prior in the
school” (ST01), “next year they will have their first stage 6 class” (ST20), “very fast growing department” (ST22) and “The school was an all girls Catholic School that had quite a strong response for textiles. However, this was after about 2 years without a year 11/12 textiles class. It’s coming back!” (ST23). One student reported that the school she attended was far stronger in textiles than food technology (ST21) and another six reported on schools with very strong textiles facilities with experienced teachers and producing work of a high standard (ST06, ST07, ST10, ST13, ST29, ST33). A tabulated summary of this information follows in Table 16.

<table>
<thead>
<tr>
<th>Textiles</th>
<th>Food Technology</th>
<th>Design &amp; Tech</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 x new textiles facilities</td>
<td>5 x schools with much higher proportion of food technology teachers. Textiles is offered with more inferior facilities</td>
<td>4 x schools with a more design and technology oriented approach Textiles only offered in 7-8 mandatory technology course</td>
<td>13 x No textiles offered or very limited textile resources. These include some boys’ schools.</td>
</tr>
<tr>
<td>4 x strong textiles facilities and teaching staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 x schools with one textile teacher offering quality programs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1x school where textiles is the dominant technology</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.4 Textiles Teachers
A total of 57 textiles teachers responded to the initial survey. All respondents were female. The textiles teachers’ quantitative data are presented under their categorised background of either home economics, fashion, design and technology or other in Table 15.

<table>
<thead>
<tr>
<th>Qual / Background</th>
<th>H. Ec</th>
<th>Fashion</th>
<th>D&amp;T</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>41</td>
<td>4</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Age</td>
<td>21-30 years</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31-40 years</td>
<td>14</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>41-50 years</td>
<td>13</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>51-60 years</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Over 60 years</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Av. Years of service</td>
<td>16-20yrs</td>
<td>16-20yrs</td>
<td>&lt; 5 years</td>
<td>16-20yrs</td>
</tr>
<tr>
<td>Av. Intended years of service</td>
<td>11-13yrs</td>
<td>5-10yrs</td>
<td>16-20yrs</td>
<td>5-10yrs</td>
</tr>
</tbody>
</table>
As the table indicates the majority of textiles teachers surveyed had been trained in the old Home Economics teaching program. The textiles teachers agreed with the head teachers on the importance of creativity in the value of textiles in secondary school. There were six prominent themes apparent in the reporting of the value of textiles by the textiles teachers, set out below, in order of most reported to least.

1. **Creativity.** Textiles teachers stated that textiles and design is an opportunity for individual students to express their creativity in a subject that they are passionate about, and enjoy and that assists with their emotional development within a relaxing past time.

2. **Success.** Textiles teachers were keen to report how their students achieve in textiles. “Students at this school achieving high marks in textiles in HSC has now enabled students to get recognition for their efforts- all of them use T&D mark to gain their high UAI’s” (T08).

3. **Career.** Textile teachers’ comments indicated that textiles education is an opportunity for the preparation for a variety of possible careers.

4. **Self-esteem.** Textile teachers’ comments on the development of self-esteem were not as closely linked to achievement and success as those of the head teachers. “Great to see self esteem build as confidence in creating grows” (T32).

5. **Self-expression.** Textiles teachers’ comments indicated the contribution of textiles education to self-expression was of similar importance to the value of textiles education in catering for students of all abilities.

6. **Leisure activity.** Textile teachers’ comments indicated the importance of textiles as a leisure activity and its contribution to consumer knowledge was weighted similarly. There were as many textile teachers’ comments on these two areas as those relating to the reported revival of textiles education in secondary schools.

The textiles teachers report on creativity as a “Channelling of creative skills to worthwhile ends” (T16) and make an observation that “Many students seek the opportunity to demonstrate creativity and the course provides for this” (T26); “Creativity in tasks appeal to a variety of learning styles” (T28) and that the study of textiles “Allows for creativity and to explore/express emotional side of the brain”
One teacher made a link between creativity and relaxation: “Provides a creative and relaxing outlet for students” (T57).

In regard to success, the textile teachers covered success from many different perspectives, from personal satisfaction to impressive HSC results. “Students gain sense of satisfaction and personal achievement” (T06), “Students love the subject for many reasons; one of which is fun and being able to do things with their hands, and achieve a good result” (T08). Some mentioned a different level of success by comments like “Develop ability to follow instructions to complete items [with] achievable goals” (T09). From the perspective of catering for individual needs there were comments like “Allows students who have talented practical skills to excel in a subject that caters for them” (T10) and “Students can do, not just follow the rules” (T11).

Some teachers show genuine empathy with the students’ desire for personal success, as illustrated by comments like “I can do it! Achievement in areas never explored” (T16) and “Practical nature provides opportunities for achievement for many students who struggle academically, especially in Years 7-10 course” (T17). One teacher taking the empathy to its extreme commented that students “Learn there’s no mistakes only design changes” (T29).

When textiles teachers discussed career opportunities there were very diverse comments from “Helps to prepare them for the workforce especially if they are interested in the design / fashion area” (T10), giving the impression that the study of textiles prepares for careers other than that related to the textiles area. A similar comment is made with a teacher stating that there are “Many outlets for various employment” (T42). The various employment opportunities include designing, modelling and self employment (T33, T54). Other teachers indicate that they have students who have entered related careers with comments like “Those who elect textiles are usually very interested and it provides a great foundation for future career paths in the area. Several students from the school have gone on to do design and fashion and interior design” (T19). “Many students would like to enter the textile industry and therefore need the valuable knowledge” (T25).
One teacher expressed the concern that the industry is not as strong as it once was and so even though “the number of students choosing textiles [electives] is increasing. Many students think that the career path in textiles is limited so the subject does not attract as many students as many other courses” (T26). This is an interesting observation considering that the students put the career opportunities as one value of textiles education that was most mentioned.

In discussing self-esteem, the textile teachers commented on how valuable the subject is to the students “for all the positive aspects it delivers to students especially their self-esteem” (T39). There is a sense that some textile teachers believe that the subject is unique in its offerings in that it “Goes beyond the 3R’s and core subjects, increasing student self-concepts” (T42). Though some teachers commented that textiles education is “Great for self-esteem” (T49), there is a sense that their comments go beyond the rhetoric that is more apparent in the head teachers comments. The textiles teachers have an intimate sense of the contribution the study of textiles makes to both boys and girls in secondary schools from daily observation of individual students.

The textile teachers’ comments relating to self-expression were more closely linked to creativity than the comments by the head teachers with comments like “Textiles allows some students an avenue for creativity and self expression” (T57) and it provides the opportunity to “Create individual garments that fit, or unique furnishings, etc” (T45). Teachers indicate that the self-expression occurs in textiles as it is a “More relaxing subject where individuality can be expressed” (T09).

From a quantitative perspective, the value of textiles to cater for a range of students of varying abilities was ranked equally to that of self-expression by the teachers. Approximately 18% of the cohort of textile teachers and head teachers reported that one of the values of textiles was its suitability for a range of abilities and learning styles. The textile teachers tended to focus more on the lower ability students than the Head teachers did. One teacher commented “I had a 10-year break from teaching and when I returned the attitude to ‘sewing’ was still the same. Students of low ability are always advised by others to do the subject even in the HSC area” (T44). In contrast there was a comment that “For lower ability students it can provide them with a
chance to succeed in producing a useable product, and maybe learn skills to earn them some money (e.g., through craft stalls)” (T54). Both are saying that the study of textiles has something to offer the lower ability students yet one appears to resent the low status of textiles education: the other applauds its capability to make a difference to students’ lives.

Textiles craft as a leisure activity and as a means of developing consumer knowledge were equally ranked (n=6). Regarding textiles as a leisure activity, the following statement was quite common “Skills in textile crafts are becoming increasingly desired by students as they can be used as a leisure activity” (T26). Comments made by the head teachers were of a similar nature. Consumer knowledge was reported by teachers in a very matter-of-fact way. The head teachers spoke more of the consumer knowledge as being relevant to the students in their everyday lives. “Develop appreciation of uses/importance of textiles in everyday living, wise consumer choices” (H22), whereas a typical response from the teachers referred to textiles education as providing “Important knowledge from consumers’ point of view” (T08). The textile teachers seem to be less passionate about this aspect of textiles, yet they feel it is a valuable aspect of the course. As mentioned in the historical development of the Textiles and Design Syllabus in NSW, there has been a shift in the philosophy of textiles education from users of textile products to, more importantly, the creators of textile products.

Under the section “your perspectives of the value of textiles in secondary schools” teachers also commented on the revival of textiles. The teachers did not use the same terms as the head teachers, however. Rather than referring to a revival, they noted increased numbers in classes, for example, “Surprising to the school this year there are three junior classes for years 9 and 10” (T44). This comment was from the teacher who said that the attitude to ‘sewing’ had not changed. Another said that “It’s [textiles and design] growing in popularity among senior students” (T37).

Table 10 summarises the collective response of head teachers, textile teachers and secondary textiles students of the emphasis placed on factors valuing textiles education and the percentage of respondents to identify with each factor.
Table 16 - Summary of the emphasis placed on factors valuing textiles education

<table>
<thead>
<tr>
<th>Head (n=49)</th>
<th>Teacher (n=58)</th>
<th>%</th>
<th>Student (n=161)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>creative interest</td>
<td>18</td>
<td>48.6</td>
<td>18</td>
<td>36.0</td>
</tr>
<tr>
<td>success</td>
<td>9</td>
<td>24.3</td>
<td>15</td>
<td>30.0</td>
</tr>
<tr>
<td>relevance</td>
<td>8</td>
<td>21.6</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>career presentation</td>
<td>8</td>
<td>21.6</td>
<td>12</td>
<td>24.0</td>
</tr>
<tr>
<td>all abilities</td>
<td>7</td>
<td>18.9</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td>cultural connection</td>
<td>5</td>
<td>13.5</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>knowledge base</td>
<td>5</td>
<td>13.5</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>consumer knowledge</td>
<td>5</td>
<td>13.5</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>self-esteem</td>
<td>4</td>
<td>10.8</td>
<td>10</td>
<td>20.0</td>
</tr>
<tr>
<td>self-expression</td>
<td>4</td>
<td>10.8</td>
<td>9</td>
<td>18.0</td>
</tr>
<tr>
<td>Leisure activities</td>
<td>4</td>
<td>10.8</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>gender issues</td>
<td>4</td>
<td>10.8</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>enjoyment</td>
<td>3</td>
<td>8.1</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>self sufficiency</td>
<td>3</td>
<td>8.1</td>
<td>5</td>
<td>10.0</td>
</tr>
<tr>
<td>technology</td>
<td>3</td>
<td>8.1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>revival</td>
<td>3</td>
<td>8.1</td>
<td>6</td>
<td>12.0</td>
</tr>
<tr>
<td>fully roundedness</td>
<td>3</td>
<td>8.1</td>
<td>4</td>
<td>8.0</td>
</tr>
<tr>
<td>textile medium</td>
<td>3</td>
<td>8.1</td>
<td>1</td>
<td>2.0</td>
</tr>
<tr>
<td>provides variety</td>
<td>2</td>
<td>5.4</td>
<td>2</td>
<td>5.4</td>
</tr>
<tr>
<td>quality teaching</td>
<td>2</td>
<td>5.4</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>skill development</td>
<td>1</td>
<td>2.7</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>cost</td>
<td>1</td>
<td>2.7</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>supportive</td>
<td>1</td>
<td>2.7</td>
<td>3</td>
<td>6.0</td>
</tr>
<tr>
<td>fashion</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>interest</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>passion</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Interview Data**

Interviews with textiles teachers were conducted to strengthen and clarify the data surrounding perceptions of valuing textiles education in secondary schools. The issues that were of major concern from the data collected from the initial survey related to how textiles education is to be sustained, given an ageing teaching community and the suggestion that current teacher training is inadequate to prepare teachers for a very demanding career path both from the perspective of knowledge and skill development. From this perspective I was keen to gain more insights into the characteristics of the older teacher and those of the less experienced teacher. Without leading the respondents, I wanted to find out how committed the teachers were to textiles teaching at different stages of their careers and their attitude to the young
inexperienced teachers entering the profession. The teachers in this study brought richness to the data.

The interviews show that both students and teachers benefit from textiles education in personal ways that are difficult to quantify but are significant nonetheless. In addition to the benefits of textiles education that the survey responses indicated, giving students a sense of the value of their cultures surfaced. It was also clear that the study of textiles allows teachers and students to share enjoyment in making things and enthusiasm for the subject. The concept of textile education providing women with a shared skill and interest that is culturally supported creates an opportunity for students to make connections with their school.

The student responses to the question of their textile experiences indicated that their perceived value was related to the knowledge and experience of the teacher. This was another avenue to explore in the teacher interviews to gain insights into the teachers’ confidence level with the content and how their knowledge and expertise has developed. The more experienced teachers were confident that they had a very good preparation for teaching and had no need to look any further to support their knowledge base. This was later contradicted in their reporting of new developments in textile technology and innovation. The teachers also made suggestions as to how the support of new teachers can be enhanced and spoke highly of the contribution that is made to their professional development through their professional associations.

The process by which the participants joined the study was described in the method section of this study but that description gave little insight into the professional lives and working settings of the six teachers interviewed. The interview data is prefaced with a brief description of each teacher’s professional life and school. As the teachers were to remain anonymous, pseudonyms were assigned. The six interviewees in the order in which the results are reported are Millie, Marjorie, Maude, Marlene, Meredith and Molly.

Millie is a very experienced teacher with a home economics background. She has been an active member of professional associations in NSW and the Teachers Federation Home Economics Interest Group through the years of readjustment to the
new structure of the Technology Learning Area. She was seen as a leader in textiles education through the 1980s and 1990s. Millie has developed as a teacher and continued to study beyond home economics to maintain her position as a Head Teacher of Technology. Her way of maintaining her credibility in the role of Head Teacher Technology was to complete qualifications to teach computing. Her expertise made her an obvious choice as a casual staff member for technology teacher training at Sydney University. She still maintains an active role in teaching textiles skills both at secondary level and with retraining teachers. Millie’s role as Head Teacher of Technology has implications for her role as a textiles teacher. Most important of all are the experience she brings to the department and the positive support she can offer the development of textiles in the school.

Marjorie has been teaching in secondary schools in the Department of Education and Training for 15 years. Her current school is a senior coeducational college in the Metropolitan South West region. She is a young attractive teacher who is very fashion conscious in her styling and has developed an effective network with people from other schools and industry. She regularly organises industry visits for her students. Her walls of her classroom are covered with inspirational photos of students’ work and photos of their industry visits. She is an assisting teacher on a staff of five technology teachers with a head teacher with a home economics background. Marjorie came to the school five years ago when the school was first opened.

Maude has been teaching for 28 years and has recently transferred from an all-girls school to a coeducational school as Head Teacher. She has a passion for textiles and belongs to the Australian Sewing Guild. Maude had little knowledge of textiles from secondary school and so she commenced teaching with a preference to teach home science.

Marlene commenced her career in secondary school teaching after her children were back at school. She had worked as a Fashion teacher in TAFE before starting a family. Marlene has been teaching in an independent girls school for 15 years and shares the senior textiles teaching with her Head Teacher. There are four other teachers in the technology department.
Meredith is a young design and technology teacher in a country high school in the Hunter Region. She completed a technology teaching degree with a specialisation in wood and metal. She was brought to my attention by older more experienced teachers who spoke of her passion and the marvellous work produced by her students.

Molly turned to teaching when she started a family. She had worked as a chef for five years and realised it was not a career that she could maintain as a mother. When her child was three she applied to the Accelerated Teacher Program offered by the Department of Education and Training through Sydney University. Part of that retraining program was a brief 30-hour course on textiles sewing skills conducted by Millie at her high school. Molly found Millie’s enthusiasm for textiles contagious and found herself hoping for opportunities to use her new found sewing skills. She enjoyed making a quilt for her son. When Mollie completed her training she was appointed to a junior high school in the Metropolitan West Region. Mollie ‘phoned me requesting assistance with the development of sewing skills in preparation for a unit of work for her Year 7 class. She wanted to make a few articles that she could display in her technology classroom to create some interest in the unit she had planned for later in the year. She was concerned that the students should be making things that they could use and be proud of.

These teachers can not be said to be representative of experienced textiles teachers and inexperienced young technology teachers, but their contribution to the study supports the claim that textiles education is experiencing a revitalisation movement. The teachers interviewed also suggest the diverse experience of teachers teaching textiles in secondary schools and the contribution textile teachers make to school communities. Even though the new teachers in the service may not be prepared with the content detail that the home economics trained teachers had when they first started teaching, they are good at networking and finding support to develop the skills and knowledge they lack. Meredith in particular demonstrated this stance with her comments. When no one else wanted to teach textiles she was prepared to take it on despite not being taught textiles in her teacher training she said “…the first thing I did was find someone who could teach me.”
It can also be said that the home economics teachers did not have the breadth of technology knowledge that they are now expected to have and have acquired during their years of teaching service. The experienced teachers have been through the ordeal of having to learn on the job the extra technology contexts that were not included in their initial training. Maude stated that she did not have a background in textiles when she commenced her training in Home Economics teacher training and yet once she experienced the creativity of textiles it not only changed her career path, it has changed her life.

All the teachers demonstrated a commitment to their teaching, but the younger teachers were still very excited by reflecting on their learning and their development as teachers. They had a greater interest in the Quality Teaching Standards. Marjorie was excited by the teaching standards as a way of analysing her teaching – “I felt like I was in a whirl wind of brilliant ideas and approaches… I carry a copy of it in my diary.” Marjorie and Meredith were more interested in encouraging ‘fun’ and ‘creativity.’ There was considerable evidence that the current teacher training is inadequate to prepare the teachers for teaching HSC Textiles and Design. Meredith had no textiles units in her Bachelor of Teaching Technology degree. Molly’s preparation for teaching textiles in Technology Mandatory in the accelerated teaching program left her feeling insecure. There were some valuable recommendations on how these teachers can develop their skills and earn the respect and trust of their students. These included:-

- Seek out other teachers who can help. If not at the school where they are teaching, in a neighbouring school (Marjorie).
- Be active members of professional associations including TEA and the Australian Sewing Guild (Maude).
- Enrol in a TAFE course to develop apparel manufacturing skills (Marlene).
- Participate in workshops in the school holidays offered by community groups, such as the textile fibre forum (Meredith).
- Visit exhibitions by textile artists and attend specialist retail fairs such the Stitches and Craft Show (Molly).
- Use the teaching standards to regularly reflect on the content and the method of presenting information to students (Marjorie).
• Take an active role in information evenings before students choose their electives (Marjorie).
• Promote the successes of individuals in the classroom school wide (Millie).
• Take an interest in the cultural background of the students (Maude).

Literature on teacher retention discussed in Chapter 3 is supported by these interviews in that the interviews present examples of how extra responsibilities have been a motivation to each of the teachers and worthy of consideration for the development and support of textiles teachers in the future (Meredith, Marjorie & Molly). The interview findings also support the opinion of student teachers that enthusiasm and encouragement are important characteristics for the textiles teacher and more important for the textile teaching community. Young teachers need encouragement and support to maintain their motivation and guide them toward greater skill and knowledge development (Marjorie, Meredith & Molly).

The school cultures that have been most supportive of textiles education have been those that plan community activities that include textiles activities such as fashion parades and displays of student work (Millie & Maude). This provides a high profile for the study of textiles, and the subject has earned high status because it is actually what attracts students and parents to the school (Millie). Also, some schools have entrusted young teachers with the autonomy to seek out support for their learning and have encouraged them to promote textiles in the school (Meredith). The school cultures that may inhibit the development of textiles in the schools may be those in which young teachers are not regarded as capable of delivering textiles programs and that the experienced teachers are regarded as the experts that the young teachers can never hope to match (Marlene). The experienced teachers in the schools maintain the control over the textiles programs and give the younger teachers little say in the programs that are delivered (Millie).

Initially, my perception was that the future of textiles in NSW secondary schools hinged on the contribution the longer standing teachers could make before retirement. This is true in the sense that their support of young teachers is essential, but young inexperienced teachers have demonstrated that they can take the initiative to seek out the assistance they need with skill and knowledge development Meredith & Marjorie).
The future success of textiles education needs experienced teachers to believe in and support the young teachers.

4.3.5 Textile teacher training provision in NSW

The student survey indicated, as mentioned above, that there was an average of 7.6% of Year 12 HSC Textiles and Design students who would consider teaching textiles in secondary schools as a career. The Hunter Region was the only area that did not have a student who would be prepared to teach textiles in secondary schools. To identify the opportunity for students to study to become a textiles teacher enrolment details for students enrolled in technology teacher training courses in NSW were obtained from the Department of Education Science and Training (DEST). The main providers of textiles and design teachers before the introduction of design and technology were Sydney Teachers College, now a part of Sydney University, and Newcastle Teachers College, now a part of the University of Newcastle. The enrolment figures indicate the number of technology teacher graduates in a selected year. After the fourth-year Sydney University Bachelor of Technology Education students graduate this year there will not be another intake of undergraduates in the teaching program. There are only three graduates in the program completing this year who will have a specialisation in textiles. The only education degree to be offered to Sydney University students will be a Masters of Education to students with a previous degree. The University of Technology Sydney offers a Bachelor of Design in Fashion and Textiles / Bachelor of Arts in International Studies. This double degree is six years full-time. So it is unlikely to be considered as a pathway to teaching with a Masters in Education degree. The College of Fine Arts, University of NSW now offers a Bachelor of Art Education with some flexibility in the four year degree allowing students to develop their individual potential as visual art and design teachers. Textiles studio introduces the cultural, historical and social context for textiles. The methodologies and structures of embroidery, weaving and the surface design techniques of dyed and printed textiles are introduced in practical and theoretical lectures. There is no fashion or garment construction. There have only been five students specialising in textiles in the teaching degree in each of the last two years.

A new provider offering teaching qualifications in association with Southern Cross University is Whitehouse Institute of Design. This is a private institution that offers a
choice of Advanced Diploma in Fashion Design, Interior Design or Styling over four years with an opportunity to complete a Bachelor of Technology Education at the same time. In 2006 the first Department of Education and Training courses were initiated for the retraining of visual arts teachers for employment as teachers of HSC Textiles and Design in government secondary schools. The most recent teacher training enrolment data for the remaining institutions that offer technology teacher training is for 2004 and indicates the courses that are offering technology teacher training but does not indicate the percentage of these students that will teach textiles when they go out into the schools. The fact that the students have been exposed to textiles education in their training is not necessarily the only factor to determine the support that the subject will receive from young teachers in the future. This was evidenced by the interview data from Maude and Meredith. The numbers that are enrolled in technology teaching degrees are more relevant. A summary of the enrolments are presented in Table 17.

<table>
<thead>
<tr>
<th>University</th>
<th>Degree</th>
<th>Year</th>
<th>Enrolments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australian Catholic University</strong></td>
<td>Bachelor of Teaching - Bachelor of Arts (Technology)</td>
<td>Pre 2002</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2002</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>29</td>
</tr>
<tr>
<td><strong>Charles Sturt University (Wagga Wagga)</strong></td>
<td>Bachelor of Educat’n (Technology and Applied Studies)</td>
<td>Pre 2002</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2002</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>114</td>
</tr>
<tr>
<td><strong>University of Newcastle</strong></td>
<td>10633 B Education (Des &amp; Tech)</td>
<td>Pre 2002</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2002</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>11172 B Teach / B Design and Technology</td>
<td>Pre 2002</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2002</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>11434 B Education (D &amp; T) [Retrain]</td>
<td>2002</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>10633 B Education (Des &amp; Tech)</td>
<td>Pre 2002</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>17</td>
</tr>
<tr>
<td><strong>Southern Cross University</strong></td>
<td>Bachelor of Technology Education</td>
<td>Pre 2002</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2002</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2004</td>
<td>33</td>
</tr>
</tbody>
</table>
The table shows a steady increase in the number of enrolments in technology teacher training degrees to 2004. The enrolments at the Australian Catholic University decreased while provisions were made for the creation of upgraded facilities. The new facilities were completed in June 2005 and the enrolments are steadily increasing with an additional 15 positions offered in 2007.

Australian Catholic University and Southern Cross University offer a compulsory introductory textiles unit to all students studying to become technology teachers but only 50% of the students would specialise in teaching textiles and be prepared to teach textiles up to HSC level. The University of Newcastle offers textiles units as electives but only a small percentage of the students elect to do the units. The University of Newcastle also gives recognised prior learning credits for TAFE qualifications in apparel manufacture or fashion. Charles Sturt University also offers credit to students who have completed a TAFE qualification related to studies in textiles. The study found that students who have had no training in textiles prior to their employment as technology teachers will still take on the role as textiles teacher if there is a need and they find an interest. As a textile educator, my concern is that these teachers have access to as much help as they need to teach the subject effectively.

The success of the attempt to re-train visual arts teachers to fill the shortage of textiles teachers will depend on the previous experience of the teachers and their preparedness to continue upgrading their qualifications. It is anticipated that these teachers will be very good with creative textile arts but might find that their weakness is with textile fibre properties and performance and garment construction. It will be important for them to have membership of the professional associations and contact should be made with them before they complete their intensive course. This will also apply to the students graduating from the College of Fine Arts in the University of NSW. They are training as visual arts teachers who have a minor in design and technology – textiles.

4.4 Summary
The first question that guided the study asked:-

1) What useful knowledge affecting the perceived value of textiles education will best support the development of effective textiles education in secondary schools in New South Wales beyond 2010?
The useful knowledge affecting the perceived value of textiles education that was observed to support the development of textiles education in secondary textiles was drawn from the common themes that arose from the head teachers’, students’, teachers’ and student teachers’ responses.

4.4.1 Common themes
The common themes that emerged from the data include:-

There were seven prominent themes apparent in the reporting of the valuing of textiles by the head teachers. They are set out below in order of most reported to least:

1. Head teachers, textiles teachers and secondary textile students saw textiles as an opportunity for students to use their creativity to produce products that interest them. The head teachers and textile teachers mentioned creativity more than any other perception of textiles education. Secondary students perception of the creativity associated with textiles education centred around the desire to make textile objects. Their mention of creativity was not as common as their perception of textiles education as being enjoyable or preparation for a career.

2. Head teachers, textiles teachers and secondary students saw textiles education as a subject that the students regard as being relevant to their everyday lives as consumers and as offering them life-long skills and an opportunity for life-long learning. Equally important to the head teachers, in their collective view, was the belief that the study of textiles provides insight into the textile and apparel industry, the work of designers and manufacturers, and relevant technologies leading to career opportunities. School students and teachers mentioned the opportunity for skill development toward a career more than the head teachers. Skill development was very specifically addressed by the head teachers and textile teachers compared to the students.

3. Head teachers saw textiles education to be of equal importance in developing a knowledge base, particularly consumer knowledge, and knowledge of cultures and of the historical significance of textiles.

4.4.2 Unique themes

1. Textile teachers and secondary students both mentioned the enjoyment factor. Teachers saw the opportunity for students to create something they could wear
and display as enjoyable. The students’ level of enjoyment appeared to be influenced by the degree of freedom they experienced and the amount of structure the teacher offered. The students saw the opportunity for freedom of choice and a change from the subjects that only focus on academic pursuits as a source of enjoyment. Students who had developed textiles skills in the family home appeared to need a teacher who could provide a supportive environment for the students without skills before they could enjoy the subject. Head teachers did not mention enjoyment in their perceptions of valuing textiles education.

2. Head teachers see textiles education as an opportunity for broad skill development through design. Skills listed included the obvious practical skills as well as time management skills; fine motor skills; critical, lateral, and analytical thinking; problem solving, life skills, numeracy, and literacy skills.

3. Head teachers and textile teachers saw textiles education as a means of developing self-esteem, and a sense of pride and as an opportunity to succeed beyond the classroom. Textile students can enter fashion competitions, participate in textile art exhibitions and create articles for charity groups (e.g., quilts of love) and such activity provides an opportunity to promote the school in the community.

4. Head teachers saw textiles education as a subject through which students of all levels of ability can achieve in a supportive environment that encourages collaboration to achieve individual and group goals.

5. Head teachers saw textiles education as a fully rounded subject for the development of head, heart and hands to teach patience and develop a sense of identity through self-expression and leisure activities.

4.4.3 Silences in the data
The subtle differences of opinion among head teachers, textile teachers and students indicate that there is not a unity of perception. Where a teacher may have a perception of how the students are receiving the subject, the perception of the student appears to be quite different. Even though students did not express specifically that textiles offers them a non threatening environment that allows them to achieve and develop the total person there was suggestion of this perception in student comments like “I
wouldn’t still be at school if it wasn’t for textiles.” Differing perceptions will be discussed in Chapter 5

4.5 Conclusions
The data is reflecting a need for caring, supportive teachers with an awareness of the students’ need to have fun while they learn. The range of skills required to teach textiles effectively to HSC students is a concern for all groups. There is evidence that the textiles experiences students have at home can influence their perception of the value of textiles both in a positive way and in a negative way depending on the degree of challenge they receive from the school work and the qualities of the teachers.

The responses of some teachers and students suggest support for the theory that textiles education in secondary schools is experiencing a revitalisation. Not all are convinced that this is a general movement as there are respondents reporting that the students have little interest in the subject and the subject does not attract the status of other subjects in the school that it competes with for enrolment numbers. There was a possible relationship shown between the variety and quality of materials available for textiles projects in a region and the corresponding enrolments in HSC Textiles and Design. This knowledge is an opportunity to promote access to materials via the internet so that regions are not disadvantaged by limited access to textiles resources.

Are there textiles teachers of sufficient quantity and quality being trained for and retained in secondary schools in NSW to ensure the continuance of the stages of textile education’s ‘revitalisation movement’ beyond 2010?

Opportunities for students to enrol in technology teaching courses continue to change. The number of places in country areas such as Wagga Wagga, Newcastle and Coffs Harbour continue to grow. Opportunities to enrol in the Sydney metropolitan area are decreasing with Sydney University only offering postgraduate studies and University of Western Sydney no longer offering a technology teaching degree. New courses such as those offered by COFA and Whitehouse School may make a valuable contribution textiles education in the future but based on 2006 figures their contribution to teacher training is limited. The majority of future textiles teachers will be trained in association with technical colleges in Wagga Wagga through Charles
Sturt University; Newcastle through the University of Newcastle and in Coffs Harbour through Southern Cross University. The number of specialist textile teachers graduating from the Strathfield Campus of Australian Catholic University is steadily increasing but is anticipated to stabilise at 20 graduates per year. With shortages of experienced textiles teachers anticipated to occur closer to 2015 current training should be sufficient to sustain the stabilisation of textile enrolments in secondary schools. It will be important for experienced teachers in their last years of teaching to mentor the new teachers that are commencing their teaching experience. There is evidence of this occurring particularly on the Central Coast, Coffs Harbour and the Southern Metropolitan area. As there were no school students in the Hunter Region who expressed an interest in teaching textiles in the future this may be an area that is more likely to experience a shortage of textiles teachers in the future.

In answering the first part of the question regarding the quantity of textiles teachers being trained and retained across NSW, there should be sufficient beyond 2010 if teachers new to teaching are supported through the first five years of their career. It was found that the majority of textiles teachers currently teaching in secondary schools will not retire until after 2015. As the majority of newly trained textiles teachers are female and at an age when they are planning to marry and start a family, it will be crucial to encourage their continued membership in professional associations and ongoing skill development while on maternity leave. The question regarding the quality of teachers being trained and retained beyond 2010 will depend on the possibilities for experienced teachers mentoring the inexperienced teachers in the schools and through the professional associations; opportunities for ongoing skill development; the quality of teacher training and the strength of networks supporting the growth of textiles in secondary schools.

Chapter 5 discusses the factors contributing to the revitalisation theory as it relates to the valuing of textiles education in secondary schools.
CHAPTER 5
DISCUSSION

5.1 Introduction
The request for perspectives on the value of textiles education was made to inform the first question of the study: *What useful knowledge affecting the valuing of textiles education will best support the development of effective textiles education in secondary schools in New South Wales beyond 2010?* The open question allowed me to gather a range of responses. The responses organised into like groups revealed inherent perceptions and concerns. These perceptions of the valuing of textiles education (VOTE) were reflected in the data with five positive views. These were:

1) the connection of students and families to the school through the study of cultural textiles;
2) the contribution to quality education as defined by the NSW Model of Pedagogy (NSW DET, 2003), (outlined in Chapter 3, p. 115);
3) the contribution to values education;
4) the opportunity HSC Textiles and Design provides to students who need a creative outlet within a highly academic program, not only offering them a change of pace and a means of self-expression but also a good mark toward their university entry score; and
5) the opportunity for students who do not achieve anywhere else in the school to stay and complete their HSC.

Not all responses were positive. There were some concerns expressed regarding the valuing of textiles education from the perspective of the cost of materials to complete textiles projects. All these views contribute to the useful knowledge that will best support the development of effective textiles education in secondary schools in NSW.

The growing HSC Textiles and Design enrolment numbers were seen as an indication of the degree of support the subject had within the school in terms of the staff expertise, head teacher support and the school culture. This chapter discusses the factors that contribute to the perceptions of the valuing of textiles
and revitalisation theory. The chapter will conclude with a summary of the valuing of textiles education in the realm of revitalisation.

### 5.2 Factors contributing to the revitalisation theory

Reflecting on the history of textiles education in secondary schools the revitalisation stages provide structure for the discussion regarding the diverse perspectives of the valuing of textiles education (VOTE) found in the data expressed by teachers, students and student teachers. As chapter 2 showed the new steady state in a process of revitalisation is a precarious position occurring just before destabilisation. Textiles education in NSW has experienced numerous waves of popularity in the past century followed by decline in perceptions of valuing, sometimes as a result of unsustainable growth. The current growth may be short lived if not supported. By raising awareness of this cyclical trend there is an opportunity to support textiles education through the final stages of revitalisation and bring about stability to support sustainable growth and a durable steady state.

The factor that most influenced the students’ VOTE was the textile experience beyond the influence of the teacher or the family. The textiles experience refers to the response to all activities that are related to the teaching and promoting of textiles education in secondary schools and includes the classroom activities, fashion parades, textiles displays, charity activities, HSC results, excursions and cross-curricular activities including Rock Eisteddfods and musicals. The current increased popularity of textile experience in the community may be perceived as an indication of the revitalisation of textiles education. The professional associations were found to be valuable in the development of textile teachers’ knowledge and expectations. The professional associations contributed greatly to the teachers’ development and to the textile experience in the school. As indicated in Wallace’s theory of revitalisation the stage of cultural distortion is the last before the final stages of revitalisation.

The attempt to destabilize textiles education as an identity separate from design and technology failed as the professional associations rallied to support the creation of a new textiles education program. The positive valuing of textiles
education by teachers and students is evidenced in the data. The data also indicates that there are differences in perception, typical of a revitalisation movement, in that different areas receiving different levels of support experience different messages regarding the valuing of textiles education. The model presented to guide the study, Figure 4, was previously seen in chapter 3 (p. 102). That model was modified to include textile experience and the role of professional associations to form the final conceptual framework of the factors influencing perceptions of the VOTE in secondary schools. The new model is presented in Figure 5.

![Figure 5 Conceptual framework of possible factors influencing perceptions of the VOTE in secondary schools](image_url)

The factor of textiles experience that was not initially anticipated in the model was found to have the greatest influence on the students’ VOTE. The textile experience within the school was found to be a point of connection between families, students, teachers and school communities. Discussion of the data and how it supports the conceptual framework and the theory of revitalisation follows.

5.2.1 Head teachers of technology

It is difficult to isolate the qualities of the head teachers that positively influence the VOTE but there was a relationship between positive comments by head teachers about the contribution textiles education makes to students and the
number of students enrolled in textiles related studies in the school. The same was true of head teachers who made negative comments about the value of textiles. The relationship between head teachers’ attitude and student enrolments in textiles was a closer relationship than enrolments and the background of the head teacher, gender, age, years of service, the size of the technology department, or even the number of teachers qualified to teach textiles in a school. This disproved the assumption that technology departments headed by head teachers with a home economics background would be most supportive of textiles education. As stated in the results chapter, the school that had the greatest average number of textiles students across the different years in a particular school was a school that had a head teacher of technology with a science background (H38) with twelve years teaching experience. This head teacher recognised that there was a growing popularity in the subject and commented that “Having taught during a time which textiles was very popular and then during a time when design and technology began which saw a diminished interest in the subject – I have seen a complete turn-around once again in its popularity. Speaking with colleagues from other schools they also support this. In short, the validity of the course is obvious” (H38). This statement supports the theory of revitalisation and the premise that those aware of the revitalisation movement can support the growth of textiles education in the schools.

A female head teacher of technology (H24) with a home economics background, who had the largest number of teachers in the department and four teachers qualified to teach HSC Textiles and Design, only offered textiles studies in Year 7, Year 11 and Year 12. This head teacher made a number of negative comments about the gender perspective, the cost of materials and “Still not valued by the community as more academic subjects” (H24). A head teacher reporting with pride on the contribution the annual fashion parade makes to the school community (H18) only had three teachers who were qualified to teach textiles from Year 7 to Year 12 and yet the department offered a study of textiles to all students in the Mandatory Technology Course, Textiles Technology as an elective in Years 9 and 10, and Textiles and Design in Years 11 and 12. Although the findings cannot be said to be conclusive, the influence
of head teachers of technology on the numbers enrolled in textiles across all year levels is a matter worthy of further examination especially in the light of head teachers’ comments concerning the future of textiles when they retire. My impression is that as long as there are teachers enthusiastic about the subject and head teachers supporting those teachers in the positive promotion of textiles, there is no need for concern about the numbers in textiles classes in the near future.

Millie, as textiles teacher and head teacher, was completely autonomous and strongly aligned to the school. It was a great arrangement for her. It was not such a great arrangement for her staff. As she stated in interview, she determined who would take the classes and what they would sew. She had themes that had run for a number of years that may not have appealed to the other teachers. She is bright and bubbly but quite conservative in her style of dress and of course she is close to retirement, so she may be described, as one of the student teachers would say, as too “mumsy” (ST32). This student commented on the strength of textiles interest in the school where she had her practice teaching, stating that;

Yes, [ there was strong interest in textiles, it] could have been more exciting i.e. pictures in the room other than the WID [Whitehouse Institute of Design] poster advertisement. It could have been improved with younger teachers or teachers more enthused with the design side, not so mumsy (despite that they were all lovely people and had good rapport with their students) (ST32).

Young teachers entering a school that is completely organised may not feel they can put their new ideas forward. Judging by the comments made by the older teachers in the service many will not regard the graduates as capable of taking any textile classes other than the Year 7 and Year 8 textiles in the Technology Mandatory Syllabus. New teachers that are given little responsibility tend to have less motivation or connection with the school. Awareness of the revitalisation of textiles and VOTE may assist with the motivation of these new teachers, knowing they are making a contribution to the development of their students in a way few other subject areas offer.
5.2.2 Textile teacher knowledge and expectations

The teachers appeared to have a considerable influence on the perceptions of students, head teachers, other textiles teachers, families, and the school community regarding the VOTE. Where the teachers were positive about the benefits of learning how to sew and of students participating in the Textiles and Design classes, this was communicated to the students and the school community providing a positive feedback to the teacher. There were instances that the students reported on the inexperience (S08, S09) and disorganisation (S08, S97, S100) of the teachers. Some students indicated that the quality of the teacher determined the enjoyment factor, yet they also stated that they enjoyed what they made. Initially I investigated whether this criticism of teachers was coming more from students who had been taught to sew outside school however, I found this was not the case. One student who reported that she had a very fussy mother labelled her teacher as bad (S195) and students who did not have any textiles experience outside the school still referred to teachers as inexperienced. It was not possible from the data to ascertain whether the students made an assumption that young teachers must be inexperienced as the students’ responses were only in the form of comments on a questionnaire. It may be an indication that some students equate the value of subjects with the professionalism of the teacher and provides a helpful suggestion for young teachers who may feel there are gaps in their knowledge and skill level. It may also indicate the learning style of the student.

There were more students reporting teachers who were encouraging. The nature of voluntary participation may influence the type of teachers who would give the survey to students to complete, and so it is to be expected that there would be a greater number of students reporting good encouraging textile teachers (S13, S14, S106, S131, S244), and encouragement was the characteristic that the student teachers considered to be important. Even students who had their own sewing mothers at home appreciated the support they received at school from the textile teachers.

The model indicates that there are more factors that determine the textile teachers’ knowledge and expectations than teacher training. The influence of the
head teacher, the students’ knowledge and expectations, the professional associations and the school community are also strong influences on the way that the teachers value the subject and vice versa. Many new teachers are aware of their limitations and seek to advance their skills and knowledge. The more proactive home economics-trained textiles teachers have continued their learning in the more innovative techniques and take their students to experts in fashion illustration and call in demonstrators of the CAD software. The leaders in the field have been active in their professional association and the more knowledge and skills they acquire, the more enthusiastic they are about teaching the subject and the more benefits they see in the learning of the subject.

One young teacher who had been teaching for 12 years was Head of Technology (H38) at a country school that had lost its most experienced textile staff member. She had a growing interest in textiles and was travelling to Sydney two nights a week to complete a course in apparel manufacture to improve her textiles skills. There were examples of other young teachers seeking mentors among their previous high school teachers who could assist them in “filling the gaps”. Where many home economics teachers believed they knew all they needed to know, and worked with that knowledge or avoided teaching what they didn’t know (Millie), the new graduates are addressing the challenge of teaching in a rapidly changing world and they know they will never stop learning or seeking to advance their knowledge and skills (Marjorie). The perception of the VOTE among these teachers is largely influenced by their motivation to stay current or acquire the knowledge and skills that they do not have.

5.2.3 Student knowledge and expectations
A student summed up her opinion of the value of textiles education from the perspective of student achievement with the comment that textiles is “A good in-between subject eg: theory and prac, and gives students the opportunity to excel when in other subjects they otherwise wouldn’t” (S131). This student had previous experience of textiles-related skill development and valued the subject for the opportunities the subject gave the other students. The contribution that textiles education makes to students was supported by data from head teachers.
and textile teachers. Students who have not achieved anywhere else in the school can develop self esteem and enjoy what they do in textiles. This sense of achievement was found to encourage students to complete their senior years and for some students the good marks they received in Textiles and Design gave them the opportunity to gain entry into university. It became apparent that if a student experiences success in a subject they are more likely to appreciate the benefits of that subject. The converse is also true. Students experiencing difficulties or feeling alienated by the experience did not value the experience or the subject. The textile experience has been viewed as a separate factor as students may have a disappointing experience and still value the subject, as will be discussed in the chapter summary.

The students’ perspective of the value of textiles can also be influenced by the acknowledgement of their previous experience or prior learning with their families. Students reported not getting the most out of their time studying textiles because they were helping other students or because other students did not understand or try to understand what the teacher was trying to teach them and as a result held up the class. The students’ comments did not indicate a resentment of the ignorance of other students but a lack of acknowledgement from the teacher. When the students felt supported, acknowledged and encouraged they felt valued and as a result could experience the benefits of the subject.

5.2.4 Family members and peers
The notion that support for textiles education only comes from homes with parents with knowledge of textiles careers or textiles craft was not substantiated. Students received encouragement from their families when the parents had no knowledge of the area and other students reported on teaching their mothers how to sew and taking them to the fashion parades and exhibitions. Some students who had parents with knowledge of textile crafts and dressmaking were critical of the organisation and inexperience of teachers, but it was not only students with this background who were critical. Teachers reported parents “turning the kids off choosing textiles” by claiming that the subject did not have the recognised academic status of other subjects. Teachers who were positive
about the contribution textiles education makes to the education of secondary students impressed the parents with the fact that a good performance in Textiles and Design in the HSC can gain the students the marks they need for university entry. When it can be claimed that the activities offered by textiles and design in selective high schools can attract students from one to another, no teacher of textiles should feel that their students will be disadvantaged by taking textiles.

Knowledge of cultural textiles was found to be a point of connection for migrant families and families with Indigenous background. The study of cultural textiles in HSC Textiles and Design provides students with the opportunity to share their inherited textile traditions and in some cases for the parents to come to the schools and share their skills to promote cultural tolerance and connectedness. This connection is a need at the very core of the human spirit (Delors, 1996, p. 20).

There was evidence that textiles activities enhance the relationship between mother and daughter. The relationship develops through their shared love of textile craft demonstrated by the comment “Mum used to sew and we go shopping together and talk textiles and go to galleries” (S100). The friendship that textiles fosters between mother and daughter was made more obvious by the comment that; “My mum sews and helps. She is a good mate” (S126), and another, “my mum is my real inspiration. She always says nothing is too hard if you take it slow. This helps me a lot” (S155). This is the type of caring attitude that needs to be emulated by teachers in the classroom and a very good argument for doing fewer projects to a higher standard. It would save on the cost of materials, and more worthwhile articles would be produced.

In referring to their friends, students said that their friends encourage them with their work and give their opinions to help determine the choice of articles they make (S16, S108). Some students also spoke of the pleasure they received from their friends’ taking an interest in what they were making in their textiles class. There were no comments regarding negative responses from their peers.
5.2.5 School Communities

The synergy effect of a school that offers textiles education across a number of year levels, and school communities that offer a range of extra-curricular activities is evident. It is not clear if the coexistence is coincidental or causal but the data indicates that textiles teachers make a major contribution to activities within the school either in the provision of costumes for the school musical or Rock Eisteddfod or the organisation of fashion parades for the promotion of the school on Open Nights and in offering after-school activities and school-holiday activities such as patchwork classes. This in turn generates numbers of enrolments in the textiles-related subjects in the school.

There are teachers who claim that they are not supported by the school community, with comments like “Textiles is the poor subject in any school I have worked in. Not only poor but badly resourced” (XRT14). It is interesting that it was not the love of textiles that attracted this teacher to teaching as she states “Textiles was not the attraction but food science I loved. Went to college and loathed the textile (practical) work we had to do. After eight years of teaching I took on textiles as I could run it as I liked. I now prefer teaching textiles. It has become a diverse area with practical” (XRT14). Like the students, this teacher is also supporting the idea that the textiles experience is more enjoyable with an element of freedom of choice. It has been my observation that compared to food technology, textiles is not well resourced but I have not experienced a teacher who tried to get resources for textiles in a school and failed. Making the effort and being positive regarding the benefits of the study in the school is the defining attitude. If the teacher can feel a sense of autonomy within the school community or is supportive of activities in the school there is a better chance of textiles developing.

Students indicated how important it was for the subject to be recognised as valuable in the decisions made in the school to offer the subject when numbers were not strong. In the early stages of revitalisation there may not be enough students electing the subject to form a class. Schools that value textiles education have made it possible for students from different years to form a single class. Timetable flexibility and school community support would be
essential for the development of textiles education in these early stages of revitalisation.

### 5.2.6 The Textile Experience

The students’ level of enjoyment in the subject appeared to relate to the teachers’ organisation and helpfulness, and yet the comments indicated an enjoyment of the textile experience beyond the influence of the teacher or the influence of the home. The sense of freedom of choice that students experience in creating textile objects was seen as an empowering experience for some students who have few opportunities for choice in other subjects. I am sure this is a feature of other subjects that require the completion of a creative project as part of their assessment: for example, visual art, design and technology, and music. Few other subjects provide the creation of an article that is as tactile and reflective of the personality of the designer as a textile article. The freedom of choice, or lack of it, was a deciding factor in many of the perceptions of students toward the VOTE. Although offering the students the choice of the article to be made is a factor that is often determined by the teacher, lack of choice can also be imposed by the head teacher. Students appeared to be more accepting of a disorganised (S97) and inexperienced teacher (S08, S09) than of teachers who did not offer any choice in what the students were making. If the student had the impression that the teacher did not know what she was doing they had the feeling that they had worked problems out for themselves. Students without choice who did not like what they were making felt frustrated at the amount of effort they had to expend for something that they felt they would never use (S131, S169, S195, S208). One student who expressed the lack of choice also stated that she regretted choosing the subject and said it “Doesn’t seem like a worthwhile subject compared to others such as Legal Studies & Ancient History” (S209). This scenario implies that the students see the textiles experience as worthwhile when they can make it their own and they can exercise personal choice. There were no comments from students regarding the dilemma of having to make a choice. It is not clear how many students do not continue with textiles as the result of a weaker teacher in the junior years but there is evidence that students will continue to take textiles regardless of the teacher, if they are passionate about the subject (S68, S250).
In regard to the revitalisation movement, students stated that they would have like to continue with textiles through the junior years after the compulsory technology studies in years 7 and 8 but there were not enough students to form a class. Other students indicated that they were in combined classes in the junior years as there were not enough to form individual year classes. The students were glad of the flexibility to offer the combined class. The students found that they could make advances in their techniques that may not have been possible in the single year classes. In schools that are experiencing the early stages of revitalisation it would take a very supportive head teacher to push for such a timetabling decision. Unfortunately in some schools the electives that are offered are determined by those who create the timetable, as previously discussed.

5.2.7 Professional associations

The most preferred professional association for textiles teachers was the Technology Educators’ Association (TEA) previously known as the Textile Educators Association. The importance of its contribution to the teachers’ knowledge and expectations was seen predominantly through the presentation of the TexStyle Exhibition and associated workshops, its conferences with a strong practical focus, the timely advice it offers through its newsletters and workshops on current issues, such as the introduction of the Quality Teaching Standards, and above all the networking between teachers from different stages in their career. Particularly important was the support that TEA offers the teachers new to the teaching area either as design and technology graduates or re-trainees.

The Australian Sewing Guild was also mentioned by a number of teachers. This association has a large membership of very experienced dressmakers who are prepared to support textiles in the schools. It runs an annual fashion parade in the Hunter Valley Region titled The National Hunter Valley Harvest Fashion Awards and provides a category for students under the age of sixteen years. In 2005 the Apex Club provided sponsorship in three categories to broaden the award offerings to students in the HSC. The Home Economics Institute of
Australia (HEIA - NSW Division) also offered sponsorship for HSC students wishing to enter the awards as they were older than sixteen years age-limit for discounted registration.

HEIA in NSW has supported textiles teachers by presenting conferences in association with the Textiles Institute of Australia, providing technical information on textile innovations and computer aided design (CAD) software to support textiles education in secondary schools. This role for HEIA was possible through the national and international networking opportunities offered to HEIA members. The main sources of information on textile innovation were the United Kingdom (UK) and Victoria, and the fashion CAD software, Speedstep produced in Germany and made available in all schools in the UK through the Design and Technology Association (DATA).

Textile arts in NSW are supported by the Textile Fibre Forum that offers a week of workshops in Orange over the Easter week each year, and the Australian Textiles and Surface Decoration Association (ATASDA) that offers regular practical workshops on all aspects of textile art techniques for teenagers and adults. The Embroiderers’ Guild also provides workshops for adults and students of primary school to secondary school age but it appears that the students may attend these workshops as an alternative to textiles at school as none of the students in the survey reported attendance at these workshops. There is also a growing number of teachers and students attending the Stitches and Craft Shows offered in Darling Harbour in July and Rose Hill Race Course in August each year. These annual shows provide all the materials and equipment that would be required for textiles education in secondary schools. They are often held in the school holidays so teachers and students from the country areas are able to attend. The classes that are offered are inexpensive and a wonderful opportunity for young teachers to learn new skills and for experienced teachers to update their techniques with new materials and equipment. The numbers that attend these events are also evidence of the revitalisation movement for textiles education occurring in the general population but predominantly middle aged women.
5.2.8 Teacher Training

Home economics trained teachers and head teachers were unanimous in their belief that they had the best training preparation for the teaching of textiles in secondary schools. They had the knowledge of textiles properties and performance and garment construction and believed they were very capable when they commenced teaching. Whether their perceptions of their ability to teach textiles when they first commenced teaching were accurate or not, their attitude about the VOTE in a school varies greatly. At the time of their graduation in the 1970s these teachers went out into schools with the stern direction not to be labelled as ‘cookers and sewers’, and not to become the caterers and costume makers. Some followed that direction and became bitter isolated and undervalued members of staff who still blame the low status of the subject in the school on everyone else. Those teachers who were passionate about their textiles were proud to share their skills wherever they could and built strong school communities around a strong textiles department.

The design and technology teachers who have been graduating over the last twelve years do not feel the stigma of being regarded as the servants of the school and are encouraged in their training to view their contribution as valuable to the promotion of the subject area and an enhancement of the school profile. I am not saying that all will make such a contribution, but their attitude and motivation appears to be different. It appears that they will try to compensate for their lack of confidence in their knowledge by participating and learning ‘on the job.’ Some secondary textiles students were forgiving of teachers who were disorganised and inexperienced, when the teachers were gathering support by their enthusiasm, encouragement and promoting the talents of the students in their care to the school community. Design and technology teachers were described by one home economics head teacher as “masters of nothing”. Many do have a concept of entrepreneurship that encourages students to achieve their best through self-promotion and their contribution to the school community.

It was found that every preparation for teaching textiles under the Technology Learning Area had its shortfalls. The TAFE fashion teachers had a shortfall in their understanding of the properties and performance of textiles. Home
economics trained teachers were lacking skills in illustration and design, both manual and computer aided. The design and technology graduates felt they had gaps in the depth of knowledge and breadth of practical skills but were very effective with their research skills and acquiring ‘just in time’ skills and knowledge. Being aware of the need to relate to students on a cultural level to enhance communication and understanding provides insights for future teacher training.

5.3 Summary of the valuing of textiles education in revitalisation

Skill development. The benefit of the study of textiles to the students for life-long skills was acknowledged by respondents in each cohort. The incentive that the study of textiles gives to the students to continue learning and developing the knowledge and skills in the area throughout life was evident in the 81% of students who stated that they would continue with their textiles skills even if they did not have a career in the field. The students who chose not to continue with the development of their textiles skills after leaving school were mainly in groups of three to six, from six schools in different areas in the state. There was no relationship of significance to the quality and variety of fabrics in the area, or the degree of support they received from the teachers, or their experiences with family members. It may be a case of not reading the question correctly and following each other in the response. If this is the case, the incidence of continued development of skills after school may well be higher than the apparent 81%, and worthy of further study.

Those students who will not be continuing with the development of textiles skills after school have acquired a body of knowledge regarding the purchase and care of textile articles and have the skills to manage simple maintenance of textile articles and the fundamental skills to build on if their interest in textiles changes in later stages of their life. It would be interesting to discover the percentage of students who would continue to develop skills in the area for any subject at school.

The range of skills listed by both teachers and students were identified in the findings in chapter 5 and include practical, organisational, problem-solving and
thinking skills. Other skills that were implied in interviews included communication skills and skills in developing relationships. There is a possibility that the development of skills in the textiles area gives the students a means of communicating with older members of their families and sharing a mutual interest.

In a 2006 reader survey for *Stitches Magazine*, the readers were asked where they were taught to sew. The most common response was from those who were taught by a family member (34%) and the next most common response was from 32% of the respondents who were taught to sew at school. To the question “will you be passing your sewing skills onto your children?” 52% said no and 48% said yes. As Hooton (2000) found, her mother did not show any signs of skills until she was asked for help. It may only be through learning to sew at school that students gain insights into their mother’s own skills.

**Development of self-esteem.** The opportunity for students to develop self-esteem was reported by textiles teachers who acknowledged the possibility for students who do not achieve anywhere else in the school to stay and complete their HSC if they know they can produce good results in Textiles and Design. “Students gain sense of satisfaction and personal achievement” (T06). “Students value [the study of textiles] for all the positive aspects it delivers to students especially their self-esteem” (T39). As textiles education has been proven to be valuable to the management of depression and stress in adults (Benson, 1975; Bazeley, 1980 & Lane, 2005b) its role in assisting with the promotion of mental health in schools may be an avenue that has not been considered previously. The knowledge of this contribution of textiles education inspired a program commenced at a High School on the Central Coast of NSW with girls with severe behavioural problems. The program, titled *Creativity through mind and body*, will be discussed further in Chapter 8, but the outcomes of the program are beyond the limitations of this study.

**For relaxation.** The VOTE in providing an opportunity for HSC students to vary their program and relieve stress was evident in the comments from students who normally follow a highly academic program. Textiles and Design offers creative
talented students an opportunity to relax in a change of pace from their other highly academic book work, and a means of self-expression and of obtaining a good mark toward their university entry score.

To support extra curricular activities in the school.
The benefit of offering the study of textiles within the school has the possibility of enhancing a culture of cooperation where the textiles teacher works with parents and students to create the costumes for musical performances and Rock Eisteddfods (T16, T19, T29, T54). Fashion parades have been used as a social event to gather the parents to the school and provide entertainment for Education Week or Open Days (Millie, H18) that promote the school. One Head teacher mentioned the popularity of textiles students with their contribution to the school when she said “Textiles students and their skills are called on often to make costumes, banners etc (important to school life)” (H43). Some schools have found that by offering textiles activities after school, the parents can become involved and share their knowledge and traditions (Maude).

The status of the study of textiles in relation to other subjects in the school.
Teachers and students made comments about textiles not being regarded as important but for all the reasons listed above it is evident that textiles education is important, especially in its difference from other subjects that are considered more academic. Comments such as “Parents are often hesitant about the value of textiles in regards to careers (computer studies is very popular)” (T39). This statement is in strong contrast to that made by Millie who suggested that parents are impressed by the contribution textiles makes to the girls’ education.

The low status of the subject compared with other subjects in the school cannot be used as an excuse for low enrolments in textiles classes. If textiles is admired as a valued subject in a selective high school there is no reason why it cannot be regarded as a subject that benefits students in any high school. The difference is in the attitude of the teacher and the head teacher in the schools and will be discussed further in the analysis later in the chapter.
Contribution toward quality and value education

Two head teachers mentioned how the study of textiles in secondary schools “Fits well into quality teaching” (H01) and the subject is “Positively based on the Quality Teaching Framework” (H24). These head teachers were referring to the NSW Model of Pedagogy for Quality Teaching in NSW public schools (NSW DET, 2003). The model was mentioned in Chapter 2, Issues in Education and Teaching, and covers three dimensions of learning: Intellectual quality, Quality learning environment, and Significance. The model can be found in Appendix E. Interview data suggested that the new scheme teachers enjoy using the quality teaching model to reflect on their teaching and find the habit inspiring. Marjorie found that the older teachers did not share her enthusiasm for the habit. This was also confirmed with interviews with Marlene, Maude and Mille – the more experienced teachers. Their response to the question whether they use the quality teaching model to reflect on their teaching was met by a disinterested response suggesting that they can’t learn anything from the model.

For cultural connection of students and families to the school. In schools that have a predominance of cultural groups that feel alienated from the education system, the study of cultural textiles may be a point of contact where families can contribute to the creation of knowledge and make a contribution to what Delors (1998) referred to as the fourth pillar of education that deals with learning to be and learning to live together. “None of the talents that are hidden like buried treasure in every person should be left untapped” (p. 6). While parents and students feel alienated from the school, the result can only be resentment and anger. If the parents can feel valued for the cultural knowledge they bring to the school a climate of communication and understanding is fostered. It is a very important solution to the ethnic hostility that has been developing over the last five to ten years.

Cost of materials to complete textiles projects was seen as a negative for the study of textiles by a head teacher (H24). This head teacher is in a school in a country area in Northern NSW that has limited access to shops that can provide materials for the students, and because of lack of commercial competition, the
cost of fabrics in the area is expensive. Other teachers in the area have overcome the problem by bulk buying the base fabrics and designing textile projects that the students enjoy, using different surface decoration techniques such as various forms of printing and dyeing and machine embroidery.

In response to the value of textiles one teacher wrote “Too much emphasis on design and prettiness not practical. Not enough on pattern use and adjustments. Not enough on basic sewing, so they could sew for the family. A hell of a lot to fit in Year 9 and Year 10 syllabus. A lot of emphasis on making things they won’t use that costs heaps” (T34). This teacher was from the North Western Metropolitan area where there are low enrolment numbers for textiles. The culture of the area focuses on working for utility products and the idea of sewing is associated with clothing self and family. This is a challenge to the future of textiles education in the area. Projects can be designed around recycling garments and calling for fabric donations, or using manufacturers’ off-cuts. There must be consideration given to the opinion of teachers in the North Western Metropolitan area as their opinions may well indicate why the enrolment numbers in the area are so low. As one other teacher from the area stated, the “Expense of providing fabric for families can be a hindrance” (T06).

If the families do not see any benefit from learning textiles skills other than the utility of products they produce they would not see the value in providing fabric for products. It is also essential that textile teachers take responsibility for the completion of textile articles. I have been amazed by the number of students who have told me that they have never used anything that they have made. If that is the case, textiles education has much to answer for. Skill development can occur with inexpensive fabrics. The feature of textiles education that so many students appreciated was the freedom of choice. In the light of the problems associated with the cost of fabrics the limit these teachers apply to choice is understandable. Choice needs to be established as something that the students earn with the development of practical and organisational skills. It is important for families whose finances are limited to see that the articles that the students create are good value for money and that they will be used, even as an art piece for display on the wall. No one should advocate sewing for the sake of
Spiritual development and well-being. The literature review indicated a possible role for textiles in developing spiritual well-being. Both teachers and students suggested an unexplainable pleasure or passion that motivated students to participate despite the ability of the teacher. Also students made comments about enjoying the activity of sewing beyond liking the article that they were producing. A connection can be made through creativity and the literature that linked creativity to the divine (Hall, 2004). Eight aspects of students’ spiritual development were outlined in the UK National Curriculum discussion paper. Below I reflect on the eight aspects of students’ spiritual development and how they can be addressed in textiles curriculum.

Beliefs - The development of personal beliefs, including religious beliefs; a developing understanding of how beliefs contribute to personal identity.

The teacher interview with Maude indicated how one of her students shared her traditional costume as an example of the value of textiles and was evidently part of her personal identity. Students have featured passages of the Koran in their textile work, designed and made vestments for priests for special church services and prayer pillows. In the study of cultural textiles many beliefs are symbolised in the textiles associated with a culture. Examples include christening robes and wedding dresses.

A sense of awe, wonder and mystery – Being inspired by the natural world, mystery or human achievement.

One teacher described the outstanding efforts of a disadvantaged student who, once taught how to spin and knit, developed beyond the teacher’s expectations when she said “I had one student who never brought her sewing yet she would do a fantastic job with the materials I supplied her. I always taught the students spinning - a kitchen assistant taught me how to spin when I was practice teaching at North Sydney Girls’ High. This one student loved spinning and she wanted to knit a fairisle jumper with multi-coloured natural wools. I wasn’t one to say no to anything students wanted to make. I visited Cowra with one of the other teachers from the school and brought back a black fleece, a grey fleece, a white fleece and
a mechanical spinner. This student just took off and produced the most beautiful jumper… I had to promote the wonderful things we do in textiles.” (Maude). The teachers also use the word wonderful when they comment on how others in the school community regard their work. Millie spoke of the awe experienced by those who came to see her fashion parades of the products she displayed in the front office. It is a sense that the creative spirit inspires human achievement.

*Experiencing feelings of transcendence – Feelings which may give rise to belief in the existence of a divine being, or the belief that one’s inner resources provide the ability to rise above everyday experiences.*

Textiles activities can inspire people to overcome disappointment and feelings of helplessness in drug programs and recovering from cancer. The data relevant to this aspect of spirituality would not prove the contribution textiles makes to feelings of transcendence yet students who considered that they would not be at school doing their HSC if it was not for textiles believed that textiles gave them the ability to rise above the inadequacies they experienced in other subjects.

Textiles and Design gave them a sense of achievement and a feeling that the creativity they experience in the subject will help them overcome their difficulties in their other subjects. The experience of using their textiles experience to overcome their feelings of frustration in their other subjects may also indicate the following aspect of spiritual development.

*Search for meaning and purpose – asking ‘why me?’ at times of hardship or suffering; reflecting on the origins and purpose of life; responding to challenging experiences of life such as beauty, suffering and death.*

It has been this aspect of spiritual development that has been demonstrated in the occupational therapy and nursing literature and an aspect of textiles that could well be experienced in secondary schools with students who experience illness. It was definitely demonstrated with one of my own textiles students at university who was diagnosed with lymphoma. Her textile projects gave her much satisfaction during the weeks of treatment and the finished projects have been a comfort to her family since her death. Schools that are involved in the Quilts of Love project also address the issue of concern for mothers and families who lose their babies at birth or soon after. They make the quilts knowing that they will be given to a family who will be mourning the death of their child.
Self-knowledge – An awareness of oneself in terms of thought, feelings, emotions, responsibilities and experiences; a growing understanding and acceptance of individual identity; the development of self-respect.

In discussing self-esteem, the textile teachers commented on how valuable the subject is to the students “for all the positive aspects it delivers to students especially their self-esteem” (T39). There is a sense that some textile teachers believe that the subject is unique in its offerings in that it “Goes beyond 3R’s and core subjects, increasing student self concepts” (T42). Though some teachers commented that textiles education is “Great for self-esteem” (T49) there is a sense that their comments go beyond the rhetoric that is more apparent in the head teachers comments. The textiles teachers have an intimate sense of the contribution the study of textiles makes to both boys and girls in secondary schools from daily observation of individual students. As one teacher stated “Its kinaesthetic so boys love it even hand sewing! (if the teacher is enthusiastic). It teaches life long skills for leisure and or employment. Great for self-esteem. [The students] Learn there’s no mistakes only design changes” (T29). This teacher’s philosophy was reflected in Marshall’s (2001b) writing regarding the importance of reducing perfectionism when students are learning so they have ownership and confidence in the skills before they are criticised for not executing them correctly.

Relationships- Recognising and valuing the worth of each individual; developing a sense of community; the ability to build up relationships with others.

As with so many aspects of education the perceptions of the teachers are paramount to the value attributed. One teacher commented “I had a 10-year break from teaching and when I returned the attitude to ‘sewing’ was still the same. Students of low ability are always advised by others to do the subject even in the HSC area” (T44). My understanding of this comment was that the teacher resented lower ability students taking the subject. I have been told by some teachers that they discourage the weaker students from taking the subject because it “doesn’t look good for the subject”. In contrast there was a comment that “For lower ability students it can provide them with a chance to succeed to
produce a useable product, and maybe learn skills to earn them some money (e.g., through craft stalls)” (T54). Both are saying that textiles has something to offer the lower ability students yet one appears to resent the low status of textiles education: the other applauds its capability to make a difference to students’ lives.

As noted earlier there was evidence of the relationship between mother and daughter being enhanced by textiles activities. In regard to sharing their textile experiences, thirty percent of student responses suggested that they share their interest in textiles with their mothers. Twenty-two percent of students had friends or other family members who take an interest in what they are making. The literature identified sewing activities as a way of re-directing attention from the difficulties of coping with a life-threatening disease so that they can share something beautiful with others (Reynolds, 2004).

Creativity – Expressing innermost thoughts and feelings; exercising imagination, inspiration, intuition and insight.

It is clear from comments made by teachers, students and head teachers that textiles develops creativity and provides a creative outlet for students of all abilities. The opportunity for a creative outlet was particularly appreciated by students who were enrolled in a number of highly academic subjects that required many hours of reading and writing. The study of textiles offers them a practical activity to express the unexplainable.

Feelings and emotions – The sense of being moved by beauty or kindness; hurt by injustice or aggression; a growing awareness of when it is important to control emotions and feelings, and how to learn to use such feelings as a source of growth (Fischer, 1998)

It is interesting that textiles activities increase in popularity at times of disaster. Textiles projects are seen as an outward expression of compassion and empathy. This is evident in the Quilts of Love Project that produces small quilts for families who have lost a child at birth. The blankets of love project knits blankets for the homeless in war torn countries, and the AIDS quilt project that was reported in Time Magazine (1992) as being “Like the epidemic itself, the AIDS quilt has grown too large. More than five hectares…had 20,064 panels, each made by the loved ones of someone claimed by the disease” (p. 20). An
embroidered army blanket that was created by Corporal Gatenby over two and a half years while he was a prisoner of war in Germany (Gero, 2000, p. 83) was a sanity saver and an opportunity for spiritual growth.

Awareness raising of the spiritual dimension is still relatively new to Australia, particularly in non-sectarian schools. McGregor and Chesworth (2005) suggested that there is a spiritual poverty in schools that needs to be addressed by Home Economics teachers. It is my belief that textiles education can provide the opportunity “for students to quench their thirst for meaning and wholeness” (McGregor & Chesworth 2005, p. 41).

5.4 Conclusion

In answering the question: “What useful knowledge affecting the perceived value of textiles education will best support the development of effective textiles education in secondary schools in New South Wales beyond 2010?” the discussion suggests a subject that benefits the students, teachers and the school given the right culture within the school. The knowledge of the relationship between the participants in textiles education including the parents and peers needs to be promoted to the future teachers of textiles and design in secondary schools. Educators should also be made aware of the opportunities to make a difference to the culture of the school by promoting the benefits of textile education in a positive and confident manner.

Perceptions of the value of textile education, and the indicators of the contribution the school culture makes to the popularity of textiles education in secondary schools, provide useful knowledge in the support of effective textile education programs beyond 2010. The study suggests the growing importance of the need for the quietness in peoples’ lives to contemplate who they are, and share that with the school community. There is a heightened sense of the need for schools to be connected to their community (Palmer, 1999). There is evidence in the research that the very act of valuing textiles from other cultures in the community creates opportunities to link that community to the school, and for dialogue that may not otherwise be offered. As home economists we
have been told we must advocate discovering one’s inner worth because it sets
the spirit free (Millman, 1998). Textiles, as the most creative aspect of home
economics, meets that need and textiles teachers need to feel proud and
honoured that they are in a position to fulfil that role.

It is disquieting to find that very talented teachers have been successfully taught
HSC Textiles and Design, only to have them removed from the classes when a
more experienced teacher arrives at the school. It will be extremely important to
support the young teachers over the next ten years to sustain their enthusiasm for
the subject until the major part of the current body of experts have retired.
Chapter six provides recommendations for the sustainable development of textiles
education in NSW beyond 2010 in regard to theory, practice and research.
CHAPTER 6
RECOMMENDATIONS AND CONCLUSION

6.1 Introduction
This study aimed to inform the home economics community, technology educators and the wider secondary education community of the factors that shape the valuing of textiles education. This was seen as necessary to develop strategies to support the growth of textiles education in secondary schools. In developing those strategies it was also necessary to decipher the extent to which the teaching supply was adequate and training institutions capable of producing quality textiles teachers beyond 2010.

The study aims were:-

- To identify the perceptions of the valuing of textiles education in secondary schools in NSW
- To determine the extent to which teacher training has affected or will affect on the teaching of textiles courses post 2010
- To develop strategies to support the growth of textiles education in NSW secondary schools

The study focused on the perceptions of the valuing of textiles education as a means of supporting the promotion of the subject. Anthony Wallace (1956) suggests revitalization as a special kind of culture change phenomenon:

the persons involved in the process of revitalization must perceive their culture as a system; they must feel that this cultural system is unsatisfactory; and they must innovate not merely discrete items, but a new cultural system, specifying new relationships as well as new traits.

(p. 265)

By uncovering the negative perceptions of the subject, the unsatisfactory nature of the culture is identified. By identifying the positive contribution textiles education makes to the lives of secondary students the means is provided for the innovation of the culture to develop strategies to address the negative perceptions through the revitalization stages. The study identified that revitalization commenced with the defence of the development of the new HSC Textiles and Design Syllabus in 1999.
The unsatisfactory aspects of the culture that were identified centred on the perception that the study of textiles and design is regarded as a subject of low academic status in secondary schools. There is also a concern that the cost of materials for the creation of textiles products is prohibitive, and that the study is therefore considered inappropriate for schools in lower socio-economic areas. This impression was reflected in the lower enrolments in areas of lower socio-economic areas. There is limited awareness of the true value of the subject to student well-being and the contribution the study of textiles makes to the school and surrounding community, particularly in lower socio-economic areas. The status of the subject was found to be reflected in the resources that support it. In October this year a textbook was finally published to support the Preliminary and HSC Syllabuses. This should provide stability to support the teachers through the revitalization movement and help to break the cyclical trend of decline after rapid growth.

Concern for a textiles teacher shortage over the next five years was not supported. The study found that the young teachers are enthusiastic and are presenting the study of textiles in a way that supports students of all abilities. The strength of the future of textiles education will depend on the completion of the revitalization of the culture of textiles teachers in secondary schools. The positive contribution the study of textiles makes to the lives of secondary schools and their communities needs to be more widely promoted. The reference books that support the Stage 6 syllabus are expensive and not readily available. There will need to be a concerted effort to produce study materials necessary to support the teachers and students effective use of the newly published text.

6.2 Recommendations

The explored literature identified the contribution that the five areas of home economics, design and technology, visual art, nursing practice and spirituality has made to inform the future role and value of textiles in secondary schools. The study found that perceptions of textiles teachers, head teachers, secondary textiles students and technology student teachers indicate that textiles education provides some students with:
• an opportunity for holistic learning where students can reflect on their links in history to previous centuries and ages through traditional craft activities.
• a connection to their cultural ancestry through costume and traditional textiles artefacts.
• a reason to stay at school to complete their senior secondary education.
• an opportunity to reflect on their responsibilities to protect the environment and develop compassion for people in need.
• a means by which students can relax in times of stress and identify with a source of pleasure (textiles activity) they can reach away from illness, loss or depression in the development of wellbeing.
• an opportunity to express themselves creatively in the way they clothe themselves and decorate their homes. In so doing they develop a true sense of self that allows for both spiritual and cultural growth.
• access to the latest technology that may not have been accessed otherwise: for example, virtual exhibitions, computer aided design and computer linked manufacture.
• an opportunity to achieve despite having limited success in other studies.

It is also anticipated that the promotion of textiles, with the value attributed by other disciplines, will see textiles not only celebrated within the home economics discipline, but also recognised as making a valuable contribution to education.

6.2.1 Theory

The theory of revitalization invites textiles teachers to examine the culture the produces the factors that shape the valuing of textiles education. The study found that schools and individuals in the textiles education culture are experiencing different stages of the revitalization movement. Some are still in the adaptation stage of revitalization. They are still uneasy with the changes made to the Textiles and Design Syllabus and the technology key learning area. It is important at this stage that there is a focus on the concrete contribution textiles education makes to quality and value education as a means of moving the resistant pockets of the textiles education culture into the next stage of revitalization – cultural transformation. In supporting teachers through this stage of revitalization it is possible to retain good teachers using the strategies indicated in the literature review in Chapter 2 and guide the teachers toward routinization with the support of texts and learning materials. Once teachers feel
comfortable in the valuing of textiles education and confident in the presentation of the content using the reflection possible using the quality teaching model outlined in Chapter 3 a new steady state can be realised. The new steady state brings with it the threat of unsustainable development. It is necessary at this stage of the revitalization to ensure good practice in the classroom, in the school community and in teacher training institutes.

6.2.2 Practice
As suggested above the recommendations for practice are identified as classroom practice, engagement in the school community and teacher training practice.

Classroom practice. The Institute of teachers guides the new scheme teachers in their reflection on the dimensions and elements of the NSW Model of Pedagogy (Appendix G). Perceptions of the valuing of textiles education commence with a pride and enthusiasm for what the study of textiles education contributes to quality teaching. The reflection on teaching is as important for the experienced teacher as the novice and can provide motivation to assist with the cultural changes necessary to bring all the textiles teachers into the new steady state.

School community. Awareness of the role textiles education can play in reconnecting the culturally alienated students and families in the school community contributes to the valuing of education in schools. Teachers need to be making a connection on a cultural level to make textiles education relevant and meaningful to those who may have difficulty relating to others. This is a common problem with many adolescents let alone migrant students in an alien community. I also recommend the suggestion of flexibility of timetabling to allow for small numbers of textiles classes to grow by the combination of year groups until the numbers are sufficient to timetable separate year classes.

Teacher training. The opportunity to develop the whole person with the inclusion of spiritual awareness in teacher training is crucial in a time when preparation for teaching textiles is combined with preparation to teach the broader specialisation of technology. There is insufficient time available to develop the competency of skill level required to effectively teach textiles yet a caring teacher can support the development of a student when a technically perfect teacher may not necessarily succeed. I am recommending that teacher training promotes an awareness of the needs of individuals in the classroom to foster the development of self esteem. Students that
are supported on this level have been found to be better at problem solving tend to be more confident in their developmental learning. Technology graduates need to develop that same confidence as preparation for their own life long learning. As technology teachers they will need to be receptive to ongoing skill and knowledge development.

6.2.3 Research
I have been made aware of a growing number of girls with behavioral problems in government secondary schools. In my local high school twelve female students have been excluded from sport because of their lack of cooperation with teachers and other students and were spending each sport afternoon in detention. In a hope to try my theories of the contribution textiles makes to the development of self-esteem I commenced a project that would allow the students to gain some exercise to raise awareness of their bodies and minds and follow the exercise with creative textile activities. The program was titled “Creativity Through Mind and Body” and aimed at developing the girls’ good nature through exercises of contemplation and creative textiles activities. The students varied in their textiles skills. Some had been taught to sew by their grandmothers but the majority lacked fine motor skills and confidence to attempt the activities offered.

Each session commenced with consideration of the theme for the afternoon. The activities included the mind and body exercises followed by a task that was related to the theme. The first week the task was quite simple and every student completed the task and had something special to take home for their efforts. It became increasingly clear that the difference in ability between the students would have to be allowed for in the choice of activities each week. There was no pressure, and no assessment. As a model for social development for disconnected students, I would like to see it tested with a cohort of girls and a cohort of boys with a steady development of their choice of skills in either knitting, sewing or felting for the development of a quilt or blanket that will become a symbol of their journey of social development over a twelve month period. Much like the blanket embroidered by the soldier in the German concentration camp or the convict women during the colonisation of Australia, their textiles activities would become a symbol of their journey to reconnection. Table 19 outlines the themes and the related textile activity.
Table 19 Themes and activities for Creativity through mind and body

<table>
<thead>
<tr>
<th>Theme</th>
<th>Textile Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always keep something beautiful in your heart</td>
<td>A heart shaped fabric envelop in the shape of a heart that the students could use to hold a fond thought or a wish. Activity inspired by Flossie Pietsch</td>
</tr>
<tr>
<td>Growing the goodness of heart</td>
<td>A scarf for teddy. French knitting on toilet roll and paddle pop sticks.</td>
</tr>
<tr>
<td>The Mind / heart connection</td>
<td>Learning to knit on needles or pretty bookmark using skills developed in first week</td>
</tr>
<tr>
<td>Do your feet bring good news?</td>
<td>Silly socks – colouring white socks with shibori techniques.</td>
</tr>
<tr>
<td>Friendship</td>
<td>Appliqued heart – introduction to patchwork</td>
</tr>
<tr>
<td>Community – the power of one</td>
<td>Mini community friendship quilt</td>
</tr>
<tr>
<td>Community – making a difference</td>
<td></td>
</tr>
<tr>
<td>Actions speak louder than words</td>
<td>Marbling and decorating baby singlets</td>
</tr>
<tr>
<td>Strengthening the community</td>
<td>Felting with sushi mats</td>
</tr>
<tr>
<td>Precious little makes a difference</td>
<td>Making purses from the hand made felt</td>
</tr>
<tr>
<td>Symbols of friendship</td>
<td>Beaded friendship bracelet</td>
</tr>
</tbody>
</table>

I recommend that research be conducted into the use of textiles education for behaviour modification and for connecting culturally alienated students to other students and teachers in the school. Opportunities to also engage with the parents of such students could be explored in the research.

**Extended contact with design and technology teaching graduates to develop standards for textiles teaching**

The Institute of Teachers has established a framework for the development of the New Scheme Teachers. The research has found that new teachers will need ongoing skill and knowledge development. In the literature review it was found that Sikora and Alexander (2004) and Birman (2000) developed models for professional development to continue the development of new teachers in areas where teacher education
programs leave off. New research into the establishment of a program with the Australian Sewing Guild, TAFE and the graduates’ teaching university to establish standards of competency over the first five years of textiles and design teachers’ career could minimise the early teacher drop out rate. A program of this nature would ensure that the teachers develop the skills and knowledge necessary to teach the senior syllabus effectively when all the current experienced teachers retire. Very few experienced teachers said they would be prepared to mentor inexperienced teachers in retirement, and so it will be essential that this support be established over the next five years.

**Secondary students teaching primary students to sew, knit, crochet or felt**

Secondary students may enjoy the contact with primary school age students in an after-school care model. It would be established as a relaxation time activity for primary school students. Primary school students can develop fine motor skills, patience and self-esteem in the creation of a lasting object that they can continue to build on as a recreational interest. Secondary students can make the contribution some spoke of in their survey responses. It may well be the beginning of career in textiles education for some.

### 6.3 Conclusion

Finally, what of the question of whether there are textiles teachers of sufficient quantity and quality being trained for and retained in secondary schools in NSW to ensure the continuance of the stages of textile education’s ‘revitalisation movement’ beyond 2010? I can confidently say that the study shows that teachers are not in short supply yet and will not be for the next ten years. Anecdotally, textiles teachers who have been given forced transfers out of schools have not been able to find a permanent position in the Sydney Metropolitan area or coastal regions. Any current shortage appears to be in the country areas. The Department of Education and Training is supporting the development of more textiles teachers and a real effort is being made to address the quality of teacher education. With more support for textiles teachers through support materials, the confidence levels of textiles teachers should be regained and textiles education can resume its place in secondary education in a *New Steady State*. The *New Steady State* will be recognized when there is acknowledgement of the benefits of textiles education in secondary schools. The
graduates will be receiving the support they need in their training to develop their confidence in their content and practical skills. Experienced teachers in the schools will be positive about supporting new graduates in minimizing any gaps in their experience. There also needs to be a return to the professional associations by the majority of textiles teachers, regardless of the stage in their career, and recognition of the contribution of professional associations to effective teaching. It is comforting to know that the New Scheme Teachers, as designated by The Institute of Teachers (2006), will be encouraged to participate in professional associations and their activities would be very beneficial to the textiles teaching community. Figure 11 acts as a conceptualisation for the future of textiles education in secondary schools. The diagram identifies the barriers to and enables of successful future growth in the study of textiles in secondary schools.

The difference of assigned value given to textiles education in the schools is primarily based on the perception of the textiles teacher responsible for the promotion and delivery of textiles programs in the school. Perceptions of the low status of the subject in schools is consistent with dwindling numbers. In schools where the subject is acknowledged as contributing to the school community and to university entrance scores of the students enrolled in HSC Textiles and Design, the numbers in the elective textiles classes are growing. Some teachers have stated that the status of the subject in the school is determined by the Principal. Teachers who are passionate and enthusiastic about the contribution textiles education makes to the lives of secondary school students have made a difference to the Principal’s perceptions and have managed to attract the support they need for the future of the study of textiles in the school.

In summary, this research made several contributions. First, knowledge of the strong regard for textile craft by occupational therapists and nurses gives textiles teachers reason to be proud of their contribution to the school. Evidence was found that textile teaching practice contributes to the multi-intelligence development of students and in some cases can change their personal situation from alienated to inclusive. Second, textiles education makes a valuable contribution to the stability of a school. Students who have difficulty communicating their differences, cultural alienation or lack of self-esteem have experienced a transformation through textiles practice, that contributes to a
more stable school environment. Furthermore, textiles curriculum has been found to assist with the promotion of a positive image of the school within the local community.

The research found that a new body of textiles teachers is developing out of the necessity to address the growing popularity of textiles curriculum within the schools. These new teachers have been supported by teachers at other schools, and by social and professional organisations, and many have sought further instruction from TAFE colleges to upgrade their technical skills. It was also found that the promotion of quality teaching in NSW schools has been embraced by these new teachers and that they reflect on their teaching practice to enhance their classroom performance. A point of warning was also acknowledged in that ‘revitalization movements’ are generally led by charismatic leaders and unless sufficient structure is built around the securing of the movement in its new steady state, the movement may once again lapse into decline. There was evidence of strong leaders in the schools who will retire in the next five years. There was also sufficient evidence of teachers ‘waiting in the wings’ for their chance to take on the leadership role. Attention needs to focus on the future of schools that have strong textiles programs. Systems need to be in place so that if and when the experienced textiles teacher leaves the school or professional association, the future of textiles education will be supported. The research found that this can best be achieved through a united effective professional association and well structured teaching resources.

Textile studies’ links to history, culture and creativity position it well for the role of developing spiritual awareness and self confidence. Textiles and design teachers need to claim their rightful role in building school morale and making sure future Australians have the skills to apply to their daily lives for relaxation and contemplation, social situations, and use in employment or as informed consumers.

There is a heightened sense of the need for schools to be connected to their community (Palmer, 1999). There is evidence in the research that by valuing textiles from other cultures in the community opportunities are created to link that community to the school. There is dialogue with parents that may not otherwise be offered. As home economists we have been told we must advocate discovering one’s inner worth because it sets the spirit free (Millman, 1998). Textiles, as the most creative aspect of
home economics, meets that need and textiles teachers need to feel proud and
honoured that they are in a position to fulfil that role.
REFERENCES


Boalch, K. (1989). Task Force to Combat Inequality: Girls will gain as further changes hit the classroom. Daily Telegraph, March 18, Sydney

Board of Studies NSW. (1999). *Stage 6 Syllabus: Textiles and Design Syllabus, Years 11-12*. Sydney: Board of Studies NSW.


Freedman, Bullock & Duque, (2005)


Karlinsky, S. Retrieved 29 / 04 / 06, from www.torah.org/learning/maharal/p3m7part4.html


Metherell, T. (1988). Letter to Dr F.G. Sharpe, Presiding Member, Board of Secondary Education, provided to The NSW Teachers Union, Home Economics representative Lorraine Cunningham.


https://www.det.nsw.edu.au/reviews/macqt/voca06.htm#Heading34


### APPENDICES

#### Appendix A: Timelines in access negotiations and data collection

<table>
<thead>
<tr>
<th>2004</th>
<th>Research Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>Obtained data on year 11 &amp; 12 textiles and design enrolments 1999 - 2003</td>
</tr>
</tbody>
</table>
| August | 30/08/2004 Application to conduct Research RMIT HRESC  
Application to conduct research in NSW Department of Education and Training |
| September | 16/9/2004 Application to conduct research Catholic Schools Office of Armidale, Bathurst, Broken Bay, Canberra-Goulburn, Lismore, Maitland-Newcastle, Parramatta, Sydney, Wagga Wagga and Wollongong Dioceses  
20/9/2004 Diocese of Broken Bay approval  
22/9/2004 Catholic Education Office, Archdiocese of Sydney, Approval  
29/9/2004 Diocese of Parramatta approval |
| October | 6/10/2004 Diocese of Lismore decline application to conduct Research  
19/10/2004 Diocese of Broken Bay Approval  
28/10/2004 Diocese of Wollongong Approval |
| November | 26/11/04 RMIT HRESC Approval  
Diocese of Maitland-Newcastle Approval  
Catholic Education Office, Sydney, approval of additional Schools  
30/11/04 Survey kits to Principals in Parramatta, Broken Bay, Wollongong and Maitland-Newcastle Dioceses |
| December | 17/12/2004 Diocese of Armidale Approval  
21/12/2004 Diocese of Canberra-Goulburn Approval |
| 2005 | |
| January | 15/1/2005 NSW Department of Education and Training Approval  
20/1/2005 Diocese of Bathurst Approval  
31/1/2005 Survey kits to Principals in listed government secondary schools and the Dioceses of Armidale, Bathurst, Canberra-Goulburn |
| February - May | Survey Data collection and recording  
Pilot Teacher Interview  
22/2 |
| June | 20/6 - 23/6  
Stage 1 Data Analysis  
Formation of extended response surveys  
8/6/05  
Re-send stage 1 survey kits by fax  
Finalisation of extended response surveys, interview questions and venues for Textile Innovation seminars and teacher interviews. |
<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>2/7</td>
<td>presentation of preliminary findings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preparation of student teacher surveys</td>
</tr>
<tr>
<td></td>
<td>6/7</td>
<td>Bathurst teacher interview</td>
</tr>
<tr>
<td></td>
<td>8/7</td>
<td>Coffs Harbour teacher interview</td>
</tr>
<tr>
<td></td>
<td>15/7</td>
<td>Wagga Wagga teacher interview</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transcription of teacher interviews</td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>Stage 1 Survey data collection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>And recording complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quantitative data analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transcription of teacher interviews continued</td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>Application and approval to conduct research with ACU student teachers and Whitehouse Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td>stage 1 Survey data collection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>And recording complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quantitative data analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transcription of teacher interviews continued</td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>ACU and Whitehouse Institute student teacher surveys</td>
</tr>
<tr>
<td>November</td>
<td></td>
<td>Qualitative data analysis with N*Vivo</td>
</tr>
<tr>
<td></td>
<td>8/11</td>
<td>Sydney Selective Met East Govt Teacher interview</td>
</tr>
<tr>
<td></td>
<td>10/11</td>
<td>Sydney Inexperienced Catholic school teacher</td>
</tr>
<tr>
<td></td>
<td>11/11</td>
<td>Sydney Independent Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transcription</td>
</tr>
<tr>
<td>December</td>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>April</td>
<td>21/4</td>
<td>Students, Selected Higher Education Statistics (DEST) on technology teacher education enrolments for NSW</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>Data from Stitches Magazine survey used to inform the question of community support for textile practice.</td>
</tr>
</tbody>
</table>
Appendix B1 Head Teacher Survey
Design & Social Context
School of Fashion and Textiles

Head Teacher Technology Survey
Postcode _______ Home _______ Work

<table>
<thead>
<tr>
<th>Age</th>
<th>21-30yrs</th>
<th>31-40yrs</th>
<th>41-50yrs</th>
<th>51-60yrs</th>
<th>Over 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Service</td>
<td>&lt; 5 years</td>
<td>5-10 yrs</td>
<td>11-15yrs</td>
<td>16 –20yrs</td>
<td>&gt;20yrs</td>
</tr>
</tbody>
</table>

Training and qualifications (post secondary school)

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Work other than classroom teaching

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please indicate with a tick beside the subjects you teach
Textiles technology 7 - 10
HSC Textiles & Design
Textile Art
Fashion VET

Please indicate with a tick beside the subjects you are qualified to teach
Textiles Technology 7 - 10
HSC Textiles & Design
Textiles Art
Fashion VET
Is a textiles related study included in the mandatory 7-10 D&T in your school?

- All students do some textiles in D&T
- Some students do textiles in D&T
- No students do textiles in D&T

What elective classes are currently running that offer textiles as a study area?

<table>
<thead>
<tr>
<th>No. of students</th>
<th>Subject</th>
<th>Year Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How many teachers are on the technology staff? Full-time ______ Part-time ______

How many teachers on your staff are capable of teaching Textiles
Years 7-8 _____ Years 9-10 _____ Years 11&12 _____

How many teachers on your staff are willing to teach Textiles
Years 7-8 _____ Years 9-10 _____ Years 11&12 _____

If textiles is not offered in a particular year group is most likely because

- There is limited demand from the students
- The staff are not interested in teaching the subject
- The staff are not available to teach textiles

Please give your perspectives (in point form) of the value of textiles in secondary schools

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for your contribution,

Louise DuVernet
PhD student, RMIT
Textile Teacher Survey

POSTCODE ________ Home _______ Work

Age  
- 21-30yrs  
- 31-40yrs  
- 41-50yrs  
- 51-60yrs  
- Over 60

Gender  
- Male  
- Female  
- Employment full-time  Part-time

Years of Service  
- < 5 years  
- 5-10 yrs  
- 11-15yrs  
- 16 -20yrs  
- >20yrs

Intended Future Service  
- < 5 years  
- 5-10 yrs  
- 11-15yrs  
- 16 yrs +

Training and qualifications (post secondary school)

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Work other than classroom teaching

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please indicate with a tick beside the subjects you teach
Textiles technology 7 - 10

HSC Textiles & Design

Textiles art

Fashion VET

Please indicate with a tick beside the subjects you are qualified to teach
Textiles Technology 7 - 10

HSC Textiles & Design

Textiles art

Fashion VET
Describe your textile experiences outside school
With family members
________________________
________________________
________________________
With Friends
________________________
________________________
________________________
With colleagues and / or Instructors
________________________
________________________
________________________
________________________
Association membership
________________________
________________________
________________________
________________________
________________________
How would you describe the **variety** of materials available for textile projects in your area?
Excellent       good       fair       poor       not sure
How would you describe the **quality** of materials available for textile projects in your area?
Excellent       good       fair       poor       not sure
Please give your perspectives (in point form) of the value of textiles in secondary schools
________________________
________________________
________________________
________________________
________________________
Thank you for your contribution,

Louise DuVernet
PhD student, RMIT
**Student Survey**

**POSTCODE ______ Home ______ School**

**Age**
- 12 - 14yrs
- 15 - 16yrs
- 17 and over

**Gender**
- Male
- Female

**School year**
- 11
- 12

Describe your textile experiences in school

**Years 7 & 8**

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

**Years 9 & 10**

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

What is your main source of inspiration for your textiles project work toward the HSC?

- Your teacher
- Fashion designers
- Textile Artists
- Furnishing trends
- Non apparel problem solving
- Other _______________________________

Describe your textile experiences outside school

**With family members**
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

**With Friends**
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

**With Instructors**
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
Please indicate if you would like a career in any of the following areas
(a) Textile and Design Teaching
(b) Fashion design
(c) Fashion manufacture
(d) Costume design
(e) Costume manufacture
(f) Accessory design and manufacture
(g) Active sportswear design and manufacture
(h) Children’s wear and manufacture
(i) Textile artist
(j) Textile science & / or engineering
(k) Textile dyeing and finishing
(l) Textile technology
(m) Textile and fabric design
(n) Textile manufacture
(o) Furnishing design and manufacture
(p) Fashion retail
(q) Textile retail
(r) Fashion importing
(s) Textile importing
(t) Textile quality assurance
(u) Apparel quality assurance

If you do not make a career in a textile related field, do you intend to continue to develop your textiles skills?                  Yes   No

If yes, would you consider a career as a textiles and design teacher later in life?  Yes   No          Explain

___________________________________________________________________
___________________________________________________________________

How would you describe the variety of materials available for textile projects in your area?
Excellent       good       fair       poor       not sure

How would you describe the quality of materials available for textile projects in your area?
Excellent       good       fair       poor       not sure

Please give your perspectives (in point form) of the value of textiles in secondary schools
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

Thank you for your contribution,

Louise DuVernet
PhD student, RMIT
B4 – Teacher consent letter

Design & Social Context
School of Fashion and Textiles
Telephone (03) 9925 9 111
Facsimile (03) 9925 9 119

TEACHER CONSENT FORM

You are invited to participate in a study of teacher shortage and the future of Textiles and Design in NSW secondary schools. The purpose of the study is to gather information on teacher and student experiences and aspirations related to the teaching of textiles in secondary schools.

The study is being conducted by Louise DuVernet under the supervision of Dr Rajiv Padhye of RMIT University in all NSW schools that teach Textiles and Design to HSC level. Louise DuVernet can be contacted by telephone on 9701 4081 if you have any questions about the study.

If you decide to participate, you will be asked to complete a 10 minute survey. No details of the participant will be recorded except age range, gender and the area codes of the home and school, to determine the textile support systems in the different areas.

Any information or personal details gathered in the course of the study are confidential. No individual will be identified in any publication of the results. The results of the survey will be analysed and reported as part of a Doctor of Philosophy Degree. The results of the study will be made available to you and education sectors on completion of the study in 2007.

No pictures will be taken of any of the participants. An in-depth interview of approximately one hour will be recorded on further consent of the participant only.

If at any stage in the survey you feel uncomfortable about responding you are free to withdraw from further participation in the research at any time without having to give a reason and without consequence.

____________________________________________________________________

I, _______________________________(participant’s name) have read and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant’s Signature __________________________ Date _____________________

____________________________________________________________________

I have read the description of the study and would like to be considered for an in-depth interview .

Preferred contact details Telephone ________________ Email___________________

Researcher’s Name: Louise DuVernet

Researcher’s Signature: __________________________ Date: _____________________

Please fax completed form to Louise DuVernet on 9701 4263 OR post a copy to Louise Duvernet ACU National Locked Bag 2002 Strathfiled NSW 2135

282
STUDENT/ CARER CONSENT FORM

You are invited to participate in a study of teacher shortage and the future of Textiles and Design in NSW secondary schools. The purpose of the study is to gather information on teacher and student experiences and aspirations related to the teaching of textiles in secondary schools.

The study is being conducted by Louise DuVernet under the supervision of Dr Rajiv Padhye of RMIT University in all NSW schools that teach Textiles and Design to HSC level. Louise DuVernet can be contacted by telephone on 9701 4081 if you have any questions about the study.

If you decide to participate, you will be asked to complete a survey. No details of the participant will be recorded except for the area codes of the home and school, to determine the textile support systems in the different areas.

Any information or personal details gathered in the course of the study are confidential. No individual will be identified in any publication of the results. The results of the survey will be analysed and reported as part of a Doctor of Philosophy Degree. The results of the study will be made available to you and education sectors on completion of the study in 2007.

No pictures will be taken of any of the participants.

If at any stage in the survey you feel uncomfortable about responding you are free to withdraw from further participation in the research at any time without having to give a reason and without consequence.

I, __________________________( student participant’s name) have read and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant’s Signature: _______________________ Date: _____________

Carer’s name: ________________________ Carer’s Signature ___________

Researcher’s Name: Louise DuVernet

Researcher’s Signature: Date: 283
Principal consent letter

Design & Social Context
School of Fashion and Textiles
RMIT UNIVERSITY

Principal,
Kambala,
794 New South Head Road,
Rose Bay, NSW

Dear Sir / Madam,

Your approval is requested for the conduct of a study involving Year 11 Textile and Design students, the Head of Department Technology and teachers who teach textiles in your school. The study is part of a research project on teacher shortage and the future of Textiles and Design in NSW secondary schools. The study has been authorised by the Sydney CEO.

The purpose of the survey is to gather information on teacher and student experiences and aspirations related to the teaching of textiles in secondary schools. The participants should only take 10 minutes to complete the anonymous survey. Details gathered in the course of the study are confidential. No individual or school will be identified in any publication of the results.

All potential participants will be given an information letter to keep and a consent letter to sign. In the case of year 11 students, they will be given a letter for carer consent. The teachers will have the opportunity to volunteer for a further in-depth interview that will take approximately one hour.

The primary researcher, Louise DuVernet, is a student at RMIT and the results of the survey will be analysed and reported as part of a Doctor of Philosophy Degree. Louise may be contacted by telephone on 9701 4081.

All schools that offer textiles and design in year 11 in NSW will be invited to participate. There will be no attempt to link data to specific schools or make comparisons between schools. Questionnaires attached.

Sincerely,

Louise DuVernet
PhD student at RMIT

Statement of Approval

I, __________________________ have read and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to the voluntary participation of staff and students in this research, knowing that they can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Principal’s Signature: __________________________  Date: ______________

Please fax the complete letter with approval to Louise DuVernet Fax Number 97014263 or post copy to Louise DuVernet  ACU National Locked Bag 2002 Strathfield NSW 2135
Appendix C – Phase 2 instruments

C1 – Textile Teacher extended response survey

This questionnaire is to inform the study of the sustainability of the textile teaching community for HSC students in NSW. By completing this questionnaire you are giving your consent to participate in the study conducted by Louise Duvernet for her PhD studies at RMIT University titled

Beyond 2010: The Teacher Shortage Crisis And The Future Of Textiles And Design In New South Wales

Your participation is anonymous. There is no compulsion to answer every question. Indication of postcode area helps to map the support for textiles across the state.

Textile Teacher from postcode _____ (work) _____ (home)

Years of service______ Years to retirement ______

What attracted you to teaching textiles?

What has kept you teaching textiles?

What milestones in your career have made a positive contribution to the teaching of textiles?

What have you contributed to the school community as a textile teacher?

What contribution have you made to the textile teaching community?

Describe the ideal textile teacher to encourage students to take textiles in year 7 – 10?

What characteristics are needed for an effective HSC textile and design teacher?

What skills are required of an effective HSC Textile and Design teacher?

What contribution would you like to make to Textile and Design teaching in your retirement?

Thank you for your contribution to the study
C2 – Textile Teacher semi-structured interview questions

Tell me about teaching textiles in secondary schools

What do you see as the supports for teaching textiles?

How do you see your support being improved from here?

Do you have much to do with other areas of the school using your textiles skills?

Thinking back at your own early teaching days did you feel well prepared for teaching?

So you feel quite confident of the theory you teach to HSC students?

Can you tell me what you know about the Quality Teaching Standards?

Do you have any advice on teacher training?

Do you recommend textile teaching to your students?

Is there anything else you wanted to say reflecting on your teaching and the importance of textiles in the school?
Appendix D – Phase 3 instruments

D1 - Student teacher survey data recording template

ST

Postcode

Student year

Are you attracted to teaching textiles?

Did your prac teaching school have a strong textile department?

What would prevent you from teaching textiles?

What would keep you teaching textiles?

What milestones in your career have made a positive contribution to the teaching of textiles?

What have you to contribute to the school community as a textile teacher?

What are your textile interests outside teaching?

Describe the ideal textile teacher to encourage students to take textiles in year 7 – 10?

What characteristics are needed for an effective HSC textile and design teacher?

What skills are required of an effective HSC Textile and Design teacher?

What gaps do you believe that you have in your training that you would like addressed?
You are invited to participate in a study of ACU Technology graduates teaching, or wanting to teach textiles in NSW secondary schools. The study is part of a research project on teacher shortage and the future of Textiles and Design in NSW secondary schools. You are requested to complete the enclosed survey and return it in the envelope provided. It should only take 10 minutes to complete the anonymous survey.

Details gathered in the course of the study are confidential. No individual or school will be identified in any publication of the results. The purpose of the larger study is to gather information on teacher and student experiences and aspirations related to the teaching of textiles in secondary schools.

ACU graduate teachers currently teaching textiles or who would like to teach textiles in the future are invited to attend an information afternoon tea with like minded graduates on Wednesday 14th December, 2005 at 4pm. Please also find information on up coming events that would be valuable to those teaching textiles.

The primary researcher, Louise DuVernet, is a student at RMIT and the results of the survey will be analysed and reported as part of a Doctor of Philosophy Degree. Louise may be contacted by telephone on 9701 4081.

All schools that offer textiles and design in year 11 in NSW were invited to participate from January this year. There will be no attempt to link data to specific schools or make comparisons between schools.

Sincerely,
Louise DuVernet
PhD student at RMIT

Statement of Approval

I, __________________________ have read and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Graduate’s Signature: _______________________ Date: ______________

Please fax the complete letter with approval to Louise DuVernet Fax Number 97014263 or post copy to Louise DuVernet with the survey in the envelope provided.

Researcher’s Name: Louise DuVernet
Researcher’s Signature: _______________________ Date: ______________
### Appendix E – Qualification Codes on Head Teacher and Textile teacher coded survey data

<table>
<thead>
<tr>
<th>code</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B.Ed Home Ec</td>
</tr>
<tr>
<td>2</td>
<td>Dip Teach H.Ec</td>
</tr>
<tr>
<td>3</td>
<td>Home Ec Teachers Cert. NZ</td>
</tr>
<tr>
<td>4</td>
<td>Teaching Cert H.Ec</td>
</tr>
<tr>
<td>5</td>
<td>B.Ed D&amp;T/TAS</td>
</tr>
<tr>
<td>6</td>
<td>BT/ BA D&amp;T</td>
</tr>
<tr>
<td>7</td>
<td>Ass. Dip in D &amp; T</td>
</tr>
<tr>
<td>8</td>
<td>DATTA D&amp;T</td>
</tr>
<tr>
<td>9</td>
<td>Diploma of Education</td>
</tr>
<tr>
<td>10</td>
<td>Diploma of Teach - Fashion</td>
</tr>
<tr>
<td>11</td>
<td>Fashion Certificate</td>
</tr>
<tr>
<td>12</td>
<td>Assoc. Dip in Fashion</td>
</tr>
<tr>
<td>13</td>
<td>Tech. Teacher Taining</td>
</tr>
<tr>
<td>14</td>
<td>B.Ed Computers</td>
</tr>
<tr>
<td>15</td>
<td>Grad Dip Computers</td>
</tr>
<tr>
<td>16</td>
<td>M. Design</td>
</tr>
<tr>
<td>17</td>
<td>M. Ed. Leadership</td>
</tr>
<tr>
<td>18</td>
<td>M. Ed Admin</td>
</tr>
<tr>
<td>19</td>
<td>BSc</td>
</tr>
<tr>
<td>20</td>
<td>BSc IA</td>
</tr>
<tr>
<td>21</td>
<td>Dip Teach IA</td>
</tr>
<tr>
<td>22</td>
<td>Dip Teach Food Technology</td>
</tr>
<tr>
<td>23</td>
<td>Cert Hospitality</td>
</tr>
<tr>
<td>24</td>
<td>Bus. Management/Farming</td>
</tr>
<tr>
<td>25</td>
<td>Religious Ed</td>
</tr>
<tr>
<td>26</td>
<td>Grad Dip in Dance Ed.</td>
</tr>
<tr>
<td>27</td>
<td>Dip. Ed Phys Ed</td>
</tr>
<tr>
<td>28</td>
<td>Dip of Art (Education)</td>
</tr>
</tbody>
</table>

#### Other work codes

**Other Work Codes - Textile Teachers and Head Teacher survey codes**

1. Advanced Skills Teacher/ HT Welfare
2. Receptionist
3. Beauty Therapy
4. Retail
5. Office Manager
6. Interior Designer
7. Board of Studies Committees
8. Swimming Coach
9. Hospitality and catering
10. Interviewer B of Stats
11. Creative Arts Consultant DET
Appendix F
PHASE TWO TEACHER INTERVIEWS

Introduction

Interviews with textiles teachers were conducted to strengthen and clarify the data surrounding knowledge of secondary school cultures that promote and enhance the study of textiles and those that limit participation and the perception of the value of textiles education. The issues that were of major concern from the data collected from the initial survey related to how textiles education is to be sustained, given an ageing teaching community and the suggestion that current teacher training is inadequate to prepare teachers for a very demanding career path both from the perspective of knowledge and skill development. From this perspective I was keen to gain more insights into the characteristics of the older teacher and those of the less experienced teacher. Without leading the respondents, I wanted to find out how committed the teachers were to textiles teaching at different stages of their careers and their attitude to the young inexperienced teachers entering the profession. The teachers in this study brought richness to the data.

The interviews show that both students and teachers benefit from textiles education in personal ways that are difficult to quantify but are significant nonetheless. In addition to the benefits of textiles education that the survey responses indicated, giving students a sense of the value of their cultures surfaced. It was also clear that the study of textiles allows teachers and students to share enjoyment in making things and enthusiasm for the subject. The concept of textile education providing women with a shared skill and interest that is culturally supported creates an opportunity for students to make connections with their school.

The student responses to the question of their textile experiences indicated that their perceived value was related to the knowledge and experience of the teacher. This was another avenue to explore in the teacher interviews to gain insights into the teachers’ confidence level with the content and how their knowledge and expertise has developed. The more experienced teachers were confident that they had a very good preparation for teaching and had no need to look any further to support their knowledge base. This was later contradicted in their reporting of new developments in textile technology and innovation. The teachers also made suggestions as to how the
support of new teachers can be enhanced and spoke highly of the contribution that is made to their professional development through their professional associations.

The process by which the participants joined the study was described in the method section of this study but that description gave little insight into the professional lives and working settings of the six teachers interviewed. The interview data is prefaced with a brief description of each teacher’s professional life and school. As the teachers were to remain anonymous, pseudonyms were assigned. The six interviewees in the order in which the results are reported are Millie, Marjorie, Maude, Marlene, Meredith and Molly.

**Millie**

Millie is a very experienced teacher with a home economics background. She has been an active member of professional associations in NSW and the Teachers Federation Home Economics Interest Group through the years of readjustment to the new structure of the Technology Learning Area. She was seen as a leader in textiles education through the 1980s and 1990s. Millie has developed as a teacher and continued to study beyond home economics to maintain her position as a Head Teacher of Technology. Her way of maintaining her credibility in the role of Head Teacher Technology was to complete qualifications to teach computing. Her expertise made her an obvious choice as a casual staff member for technology teacher training at Sydney University. She still maintains an active role in teaching textiles skills both at secondary level and with retraining teachers. Millie’s role as Head Teacher of Technology has implications for her role as a textiles teacher. Most important of all are the experience she brings to the department and the positive support she can offer the development of textiles in the school.

Louise  
What was your motivation to become a textiles teacher?

Millie  
I became a Home Economics teacher because of my needlework teacher at school, then when I was in high school it switched to being called Textiles and Design. That was with Fran McLachlan in the Sutherland Shire. That was wonderful. I just wanted to be her so in senior high school I took up Home Science as well and went off to become a Home Economics teacher. And then while I was at teachers’ college, while I was prac. Teaching, I met a woman who had a great impact on me and that was Val Waddell, Head Teacher at Moorefield Girls High School, so dynamic and so exciting, and just so wonderful. So between those women they had the nature. And also at college Miss Young, textile educator at college, Miss Rogers, our food science educator at college, they were just the most impressive women that motivated me for my career.
Millie was making herself quite clear that the terminology I used to describe her teaching needed to be in the context of her training. Her passion for textiles teaching was inspired by wonderful teachers, so she had great models to emulate in her own teaching. It is a model that she continues with her own staff.

Louise  Do you feel you needed a lot of support as a young teacher?

Millie  We got a lot of support when I was teaching ’cause you came out to the Home Economics faculty and the Head Teacher and there were only the four of us so the Head Teacher and you knew what you were doing. I had tremendous content, tremendous skills, all I really had to do was learn how to teach it to the students... I had been studying [textiles] for years so it wasn’t as if I was learning content. I was learning how to teach that content in the best ways. So I always felt completely supported.

Millie was confident in her content knowledge and demonstrates the belief that a teacher has knowledge that they “teach” to the students. She believes she was a complete package when she commenced teaching and supported in her teaching in her early career.

Louise  So you feel that is different to the experience of new teachers these days?

Millie  Yes, it’s different to the young teachers coming out. Well there aren’t any young teachers coming out but the ones who do come out unless they did a TAS subject at school they have very little skills or content and particularly now that we are asking them now to be a Bachelor of TAS. What does that mean they are good at? They have a little bit of woodworking, a little bit of textiles, a little bit of food, a little bit of everything but masters of nothing, so I guess that is my concern for those coming out but most of them will have a strength in something that attracted them to go into it...

In saying that there are no young teachers coming out Millie demonstrates the opinion that there are not enough young teachers coming into teaching. As she is working in the retraining program, the students she is teaching were originally trained in another subject area or came from another career. Most of them already know how to teach but they have limited content knowledge of the Technology Learning Area. Millie was not initially trained in all of the technologies in which she is now proficient. There were no such things as computers in the schools when she first started teaching and she is now teaching computers and heading a Technology Department. Millie is familiar with what it means to be a Head Teacher of Technology and is very aware of the demands of the Technology Learning Area but has little faith in the young teachers of the future.

Millie  … if I was a 17 year old boy or girl I wouldn’t want to become a TAS teacher for fear of being asked to teach eight different contexts. You think you have to know all these things so that’s a bit daunting. So if a young teacher comes out with a textiles background and has trained at TAFE in fashion she could get anything. She could get a woodworking class, she could get anything. If you go into a TAS faculty you don’t go in as a textiles specialist you go in as a TAS teacher and you have to teach all of Years 7 & 8 Technology, which is
computing, woodwork, tech. drawing, textiles, food. I try to keep people in their comfort zone and move students around staff because I have the traditional Home Economics teachers here and Industrial Arts teachers and some have not trained in the new context areas and impossible to train so I don’t bother going there. That’ll be the difficulty and I train here, so she would be expected to teach up to year 12 in any of those areas, in computing or food or textiles.

There is real value in the observation that even when teachers have a strong background in textiles education there is no guarantee that the school will offer textiles or that the textiles classes will be offered to that young teacher. Millie is viewing the career of a TAS teacher through her experience as a Head Teacher. It is clear that the student teachers need to be made aware of the ongoing learning process that will face them when they commence teaching but our new teachers from the Bachelor of Teaching/Bachelor of Arts degrees are informed of all the areas of technology and well briefed in the practical applications and occupational health and safety issues before they go out to the Technology Departments but lack the depth of knowledge in a specific technology. There is no requirement for students who are applying for enrolment in the Bachelor of Teaching/Bachelor of Arts Technology to have previous experience in any of the technology contexts. When Millie admits that some of the teachers are home economics teachers and industrial arts teachers that are “impossible to train,” she is also saying there that credit needs to be given to students who are coming out to the schools with an awareness of all the technology contexts.

Louise As the Head of Department you can make decisions about who teaches what? Do you feel you can keep the textiles to yourself?

Millie Yes, I only have two out of the seven with the traditional Home Economics training, just myself and one other lady who can teach textiles, and at the moment we have year 9 – 12 wanting to do textiles which puts a lot of pressure on us. The other young woman I have is a re-trainee who retrained from a language teacher as a computing studies teacher and in the training they do a little bit of wood and electronics, now I have trained her to do year 7 & 8 textiles and food and she is enjoying it, and is doing really well at it and it is my expectation that in 3 or 4 years I would like her to take a year 9 or 10 elective textiles class. That’s if it survives.

Millie has a belief that the only teachers to teach textiles education in secondary schools come from a home economics background. She made an attempt to teach new skills to the retrained teacher but is not confident that textiles as a subject in the school will survive with the limited numbers of teachers capable of teaching the subject. She presented a common problem that has arisen out of the retraining programs. The graduating re-trainees fill positions in the schools that could have been occupied by fully qualified graduates with extensive experience in a wider variety of
technology contexts. Head Teachers who take on the re-trainees are made responsible for completing the training that should have been completed in their preparation for technology teaching. The problem of developing specialisation skills within the technology teacher preparation programs will be addressed in Chapter 8.

Louise        What do you do to promote Textiles in the school?
Millie        We have the fashion parade that is a huge event. We have a mannequin down the front of the school and when a girl finishes a garment it goes on the mannequin for four or five days with their name tag and what the project was for … a great thing for when people walk into the school to visit and we also have our display cabinets down there and they have year 10 soft toys in there at the moment and they will come out soon and the year 11 cushions will go in, or their bags and that is always a great advertisement for the school. It is amazing the number of comments I get over the years from people who come into the school and they go ‘oh you are still doing sewing in a selective high school, oh gosh!’ They are always very impressed. They say that is wonderful and I have my favourite line that I tell them that the best thing about our selective school is that our girls are bright and they are clever at all sorts of things…

Millie has successfully and proudly maintained a high profile for textiles in the school and it is a model that needs to be considered for future textiles teachers. The subject is highly regarded in the school and the students who take the subject are intelligent young women.

We also have the school intranet so we photograph all our girls projects, wearing them and they all go on the intranet and it is good as a reference for work samples, so the girls in 7 & 8 can click on the year 9 interests and see all the girls pyjamas and their dresses and of course the fashion parade is bigger than Ben Hur. It’s huge we’ve even had caterers in because we time the open night with the fashion parade after the year 6 girls receive their letters of entry. They have often been accepted by a number of selective high schools so they go to all the open nights to make their choice and we know that on more than one occasion they have made their choice to come to our school because of the fashion parade. They find it wildly exciting that a school could possibly do that, that is where they want to be. There is just standing room only in the hall and light and action it is just fabulous.

Everyone gets involved and for our multimedia subject we film it all and they download the footage of the fashion parade and the year 10 students use all that footage in the films that they make with the girls…

The textiles related activities are central to the school activities and a positive aspect of the school that attracts the students. It also provides a vital link to the community that the school supports. It is also provides a way for female students to become involved in technology and using computers.

Louise        What factors influence the status of textiles in the schools?
Millie        Hmm probably without any modesty the fact that I am a textiles based head teacher who has really pushed it in the school. Because when I came here the textile numbers were strong but that was a long time ago and the school demographics were quite different and we had food tech then but the demographics were quite different and as the school has changed the food tech. has just fallen away, but I have maintained the senior textiles which is a bit of a miracle when you look at the students who are very very highly intelligent and the IQ has gone up astronomically so most of the parents just want the
students to do maths and science and the fact that I did struggle and managed to get up a class each year and now we have been hit by the HSC rules that they have to do 10 units in year 12 so my year 11 class that was 14 has now dropped to 6 so those 6 are my golden girls they are the ones who are absolutely passionate and love and are perhaps hoping to have a textiles based career. So you know I do a lot of work to get that all the fashion parade and all those mannequins start off with year 7 with 150 girls and just about all of them get their fashion unit in year 7 or year 8 and then you get your year 9 class and you hold the numbers through to year 10 and every August I go into a mental stress worrying that I will get a senior class because we did lose a senior textiles class for 2 years and then we got it back. It was just before the new syllabus started because I had been doing design and tech. And then we switched because I had lost the Design and Tech class but it was just the changing aspirations of the year and the changing HSC rules.

This first-hand account reinforces the perception that the Head Teacher has a considerable contribution to make to the status afforded to textiles education in secondary schools. When rules are changed regarding the HSC, the change is also likely to affect the enrolments in the subject. Millie’s comment provides evidence of the growing popularity of textiles education in secondary schools: the fact that there was no Textiles and Design class for two years before the introduction of the new Textiles and Design syllabus.

Louise Have you had much contact with young teachers through the professional associations?

Millie I haven’t been to a lot of those in recent years. No, I haven’t come in contact with many young teachers, well I make it a standard joke, I just don’t see many young teachers. That’s just the way it is but when I do I always give them tremendous encouragement. Most of the teachers are finding like me that they are so engrossed in their work at school that it is all encompassing, that they don’t really have any time for anything else. Because even my work with TEA… really fell off over the recent seven years and I’ve only just started to get a little more interested in it now. So all the learning that I’ve had to do around here are all my staff changes and that sort of thing.

Millie’s comments illustrate that administrative roles are time consuming and tiring. Head Teachers need to prioritise their time and can lose contact with the professional associations and fall behind in the maintenance of the latest technologies or innovations. Their not having the contact with the professional associations means that there is less contact for the young teachers who need to be in contact with positive mentors.

Louise Do you see value in the quality teaching standards?

Millie Yes I think the concept of the Teaching Institute that idea of putting forward a portfolio of work and reaching a standard is good. I just suppose I have seen over the last 30 years and the difficulty that I have felt and have impacted on my faculty in recent years. I don’t have many thoroughly trained teachers in their area, so they pretty much learn on the job. But then we learnt on the job too, but then the only areas I was trying to learn in was only food and textiles and what I say to people as a Home Economics teacher I had an extensive breadth of knowledge and skills to know all about food and nutrition, food preparation procedures and all that to know all about textiles and printing and dyeing, I
Millie admits the steep learning curve all in the technology area had to experience with the move of the Home Economics and Industrial Arts subjects into technology, yet she can not accept that the new teachers are going to be able to address the challenge. She reinforces the previous discussion regarding the need for Head Teachers to provide the on-the-job-training to their staff.

Louise What would be your advice for teacher training?

Millie I just think that the system we had was perfect and once they destroyed that, they destroyed something that worked, because of the very nature of young people. I don’t know too many young women who are interested in working in woodwork or metal work - that is just the way that it is. They are fascinated by food and textiles because it is a girl thing. It just works. They were very passionate and happy about what they did and the boys did their thing. There was a bit of a gender cross-over but not much.

The gender perspectives are wide and varied between teachers. There is some indication of the resentment of changes to curriculum made in the past. In teacher training we do see the girls who like to cook and sew but increasingly we are finding a new breed of sensitive caring young men who genuinely enjoy textiles especially making up the latest shirts and cardigans from commercial patterns from the 1970s. In teacher training we now offer specialisations so that students choose from a specialisation in food and textiles or wood and metal. The majority of those who choose to specialise in food and textiles are female, and those who choose to specialise in wood and metal are predominantly male, but the decision is left to the students.

Millie Boys might be quite keen to become an Industrial arts teacher but when you tell them that when they go out into the school they may be asked to teach food and textiles and they say “oh no I don’t think so.” So it really is against human nature. I just like people to be very comfortable in at least one or two. But the difficulty is then what happens to them when they go out into the schools because this is a TAS department because the girls don’t show the interest in all of them but they could be asked in a school to teach across the whole of the context areas in a coeducational school. I try to let them get their feet in the junior classes but that is not often the case. The two re-trainees that arrived last year were both given HSC ITP classes because they were the people who they were replacing …because that was what they were retrained in, in computing 7-12. I don’t have anyone else, so now I have people on my staff who can teach the senior textiles, the people who teach senior IPT and then I’m asking more of my staff to multi skill to do years 7 and 8 so one teacher can take them right through all the context areas.

Millie again shows her compassion and support for the teachers while they are establishing themselves, but is realistic about the needs of the school and her students. Even though Millie gives the impression that her re-trainee teachers are never going
to be the teacher she is, her support for her staff provides the training to build a strong technology department. In regard to her future teaching Millie commented that

Millie  I have five more years of teaching mainly because the stress and pressure that I work under every day. I just don’t think I could cope for another 10 years. It will kill me…the nature of constantly learning new things and teaching the staff and it seems like the last 15 years I have been constantly learning new things and new skills which technically is all very wonderful but it is also very exhausting and sometimes I would like to be in a time warp back in 1976 and sort of just walking into a classroom and just knowing what I was doing. Now it’s different, you walk into a classroom it is very experimental. The nature of the girls is different, the way I teach is different, and the sort of sewing we do is different. You have the domestic overlockers now and all the traditional way of sewing is gone. If it looks good on the outside it will do because you’re competing against Kmart so the nature of the projects that I do I market the textiles in the school from the creativity point of view so it is all about your wonderful talented daughter can design things and we can be very creative. I don’t try to have textiles for them to make their own clothes because they just go down to Kmart and buy a $5 pair of track pants, so I just don’t touch that sort of thing.

Without knowing, Millie is reinforcing the fact that the teachers don’t need to have the knowledge about construction that she once had. They need to be learning on-the-job and learning new things all the time. Young people are just the ones to do that. They still have their enthusiasm for learning. The design and technology graduates are very creative and they seek inspiration from current trends.

Millie  … I push textiles as a life skill but if I didn’t have that creativity I wouldn’t have a class. Nothing can beat that feeling of ‘I made this!’ I tap into all those sorts of emotions. They get a tremendous thrill, you know, fashion parade night or when they are putting their toys in the cabinet. The girls just like the projects we do here they know what is going to be coming up. They got most annoyed with me this year because I changed lingerie to soft toys and they didn’t want to do it but of course once we got into it they loved them and now they are hanging for them to come out of the cabinets so they can take them home.

The promotion of the textiles projects in the schools inspires the students to do textiles. In a selective high school the students enjoy the change from only “being in their heads” to exploring creativity with their hands. A strong feature of the pleasure students gain from textiles is having choice. Millie maintains the theme approach to textiles technology through to year 10.

Millie  Soft toys are hard to make so I left it to the last unit in year 10 so they have the advanced level of skill and patience to get those three points right at a nose, like a godet, to get that point it is hard. And sure enough some of them said ‘oh this’ll be easy’ You’ve got to make it challenging and at the moment.

Students of higher intellect need to be challenged and they have high expectations of themselves. They will not be content to fill in their time with a project that is not intellectually stimulating and challenging. Millie also knows they would not be happy if the result was not good so the timing of her projects is crucial to ensure that they have the skill level to take on the task.

Millie  I don’t have any problem with the junior classes. In fact our numbers are growing because my last year 10 class from year 9 had 24 girls in it so no one else could join the class and I have a senior class of 13 girls next year and of those a couple of them have come in who
haven’t done junior textiles and what I find is that in that first month the girls go off and do their physics or chemistry and find it is not to their liking and then come back to textiles.

The problem of different levels of ability in HSC Textiles and Design is highlighted by this comment. Millie knows the skill level that the majority of students have built up over the four years she has taught them but she also realises the need of these students who have not found happiness with their previous subject choice and accepts them into the class knowing that they will benefit from the experience.

Millie  In year nine this year we have two classes we haven’t had 2 classes in elective textiles since I was first here 16 years ago. Sometimes it is just a year group, particularly with a year nine group they are a lovely group but they are a very creative group so they are all very much attracted to textiles.

Numbers in textiles do tend to fluctuate with different year groups. When there are a few students who are creative and are popular with the other students, a synergy develops and a number of other students are inspired by their creativity. As Millie states, creative students are attracted to textiles as it is seen as a subject in which these creative students can express their creativity as was noted in the student responses.

Louise  Do you have a vision of your last 5 years? What you want to achieve?
Millie  No I just think I will just keep on keeping on and I know exactly what I want them to do and we perfect, we tweak the projects and we have a pretty good idea of what the girls like - not keeping up with the modern trends, but one to just keep textiles really strong in the junior school and I will fight every year just to get a senior class. I’ve got to the point now that I am not going to lose sleep over it. If I don’t end up with a senior class in the last year of teaching I am not going to take it as a personal failure; I will just take it as the nature of a selective school. But I put a lot of effort in, I just enjoy it. Textiles here is fun the girls have fun.

Millie knows where her strengths lie and it isn’t with the latest trends. The projects that the students create are not affected by fashion trends. Her students are intellectual and the majority participate in textiles for an expression of creativity and the opportunity to do something different to their other subjects. They have fun.

Millie  Once I retire I could be replaced by a man and that will only leave one textiles teacher. That is why I am hoping that another member of my staff once comfortable with years 7 and 8, might take it to year 9 and 10. Otherwise again our numbers will be restricted by who is confident enough to take an elective class. As I teach predominantly computer subjects and I am head teacher it is quite likely that my replacement will be male. It is the nature of the beast and then they will be faced with the problem of fitting their staff into all the different areas. This is what they are faced with.

One of the trainees I gave the sewing skills to was given a year 11 textiles class because there was no one else to take it. That is the nature of some of those retraining programs. Their main area is food tech and hospitality. That’s OK, but that might only make up 12 of their periods. They have another 28 periods so they might have to do textiles or tech. drawing or computing.

It is the primary concern of teachers of Millie’s age group that they will not be replaced by a teacher of their own skill level and interest in textiles. Reflecting on the
data collected from the head teacher survey, I realize that there were only five male head teachers who responded. As the surveys were only sent to the schools that offered HSC Textiles and Design, it may be possible that the school that no longer offers any elective textiles classes and has no teacher qualified to teach textiles may have been headed by a head teacher with a textiles background. Of the five schools with the male head teachers, all with industrial arts background, only one school had students enrolled in HSC textiles. Four out of the five schools had at least one teacher who was qualified to teach HSC textiles. These four schools all offered textiles to all students in the 7-10 Mandatory Technology Course. One of the schools had 25% higher enrolments in textiles across all years than the average of schools where head teachers had home economics background. Millie’s concern for the future of textiles in her school may be reasonable but it may also be unreasonable to assume that a male head teacher would lead to the demise of the subject in the school.

Louise       Would you like to add any thing more regarding the future of Textiles and Design in NSW?
Millie         Yes I would like the opportunity to rewrite the syllabus because having taught it through a few times too many bits of it are boring. It needs a revamp because there’s too much content for a one and half hour exam and for the 6 periods a week trying to get them through their major project. It is just too much content to get through. But the nature of education today and the way we teach a lot of parts of the syllabus are just very low level thinking skills content. ..

With each further elaboration Millie is saying that the content knowledge that she found so important and what she says is missing from the graduates is actually not as important as it was in the previous syllabus and if Millie had her opportunity to re-write the syllabus would be found to be even less important.

Millie         I found was when I teach the parts of the syllabus that require the higher order thinking skills which is all the design topics in the year 11 course (and I teach them about Colette Dinigan and the history and how our historical styles are interpreted) because it is all higher order thinking about developing new styles, the girls - you can see their eyes sparkle and they are really tuned in. Whereas content based lessons - it is a grind for them and a grind for me and I’m trying to make it exciting. I rely a lot on the web and make up my own notes. If you just tried to teach the course in face to face periods you would just never cover it.

The young teachers are very comfortable with the latest designers and information they can access from the web. The following interview was with a younger teacher with home economics background.

Marjorie

Marjorie has been teaching in secondary schools in the Department of Education and Training for 15 years. Her current school is a senior coeducational college in the
Metropolitan South West region. She is a young attractive teacher who is very fashion conscious in her styling and has developed an effective network with people from other schools and industry. She regularly organises industry visits for her students. Her walls of her classroom are covered with inspirational photos of students’ work and photos of their industry visits. She is an assisting teacher on a staff of five technology teachers with a head teacher with a home economics background.

Marjorie came to the school five years ago when the school was first opened.

**Louise** Tell me what it is to be a textiles teacher in a DET senior college.

**Marjorie** It is exciting. It is one of the subjects where I can make sure that every student can do something that is special to them and when they do something that is special to them they do better. So I find it exciting, challenging and exciting.

The passion that this caring enthusiastic teacher takes into the classroom is in seeing her students achieve.

**Louise** How did you come to be teaching the senior textiles in this school?

**Marjorie** The first two years that it was taught here the class started with 22 or 23 students and about 12 students dropped the subject, claiming that the teacher didn’t have enough expertise, that she didn’t help them. They felt they weren’t being challenged and looked after so the numbers dropped and the following year we didn’t get a class at all. Its like it just dissipated. Only about 10 students showed any interest from the 3 feeder schools. In the following year on the subject selection night for the year 10’s I put up a big display and I stood there the whole night and tried to push the subject and it worked because we got a class of 23 and it dropped in numbers the first year and dropped down to like 15 and then the following year we picked up a class of 23 again and 22 just completed the HSC and next year we’ve picked up a class of 23 and we have a waiting list.

The faculty has a digital camera so I take photos of everything and use that to promote the subject at the year 10 subject selection night. They make their choices that night.

Marjorie was enthusiastic about textiles when she arrived at the school but there was a teacher who was expected to have the qualifications and years of experience to take the Textiles and Design students to their HSC examination. Marjorie helped with the promotion of the subject to the feeder schools, but it wasn’t until the other teacher left that she acquired the position of HSC Textiles and Design teacher.

**Louise** Do you have much contact with the feeder schools?

**Marjorie** I have invited the year ten teachers from the feeder schools up to see the progress of the major projects. They often decline but I insist that they come up on the day that the projects are to be sent into The Board and I get them to take photos and you know they are her ex-students too and I try to see if we can get fashion parades with the junior campuses but the timing is always all wrong. By the time the projects come back from the marking centre the year 12s have gone and basically its all too hard.

With a senior college the teachers can’t build up a rapport with their students from Year 7. They have to hope that the feeder schools have textiles teachers that inspire the students and provide them with the level of skill develop they require to satisfactorily complete their HSC major project. Marjorie tries to maintain
communication with the teachers at the feeder schools, but in the creation of these
senior colleges the other high schools in the area lose their senior students. It would
make it difficult for textiles teachers to maintain their enthusiasm for textiles knowing
that the best of Textiles and Design teaching is taken from them.

Louise You told me about a dress that was inspired by the pink breast cancer
ribbons. Is this something that you do with the students – find inspiration
from charity events?

Marjorie I think maybe I got a little melded because I teach DT and textiles and this girl… had
someone pass away with breast cancer in her family so I convinced her to use that as her
inspiration. I felt it was a little bit too Design and Technology having a real live
inspiration but it worked really well for the textile brief and the supporting
documentation.

Marjorie has a different approach to developing a theme for the major textiles project
that is based on the students’ own experience so they have a close connection to their
work and develop an emotional attachment to it.

Louise What do you see as your greatest support for teaching textiles?

Marjorie My greatest support was a mentor… I knew her through my old home science teacher
and… I asked my principal if I could meet with her … twice a term and I did that and that
was the absolute best support I could have got. I couldn’t have done it without her. I knew
if I was going to build the subject and build it good that I would have to know what I was
doing and I found the syllabus was very hard, very broad and I got lost in it a few times, I
needed help. I was the only textiles teacher in the previous school I had come from and
someone else came in but I didn’t keep in contact with her.

I couldn’t live without the TEA network meetings with Robyn Stewart etc. Attending the
conferences, I couldn’t live without that. Not only do you see the resources and hear
about new things but I chit chat with the other women and you just can’t put into words
how much that supports you.

This is a young teacher who knows what she needs and knows how to get it. Marjorie
show initiative as much in the support she musters for herself as in the promotion she
does for the subject she is so passionate about. She is an active member in the
Technology Educators Association (TEA) and values the communication she has with
other teachers through her membership of a professional association.

Louise Thinking back at your own early teaching days did you feel well prepared
for teaching?

Marjorie I was Bachelor of Education Home Economics with DT. We were the first year to come
out with that and I did the whole textile arts, textile science I knew the properties of
textiles back the front. Anne Fritz makes sure of that and I haven’t felt the need to get any
formal training since and the mentoring I have received and the 2 day TEA creative
sewing course with Bernina was absolutely the best thing I have ever done. It was
intensive and quick but so informative and good for the classroom. It taught me about
new technology I could buy and how to use it. It was brilliant.
Marjorie felt quite confident with her content knowledge and skill base from her teacher training. She is also keen to stay current in her knowledge through active involvement in her professional association.

Louise  How do you see your support being improved from here?

Marjorie  It would be good to do more in fabric decoration, fabric surface decoration techniques, new products, what other people are doing, see what other people are doing - and sometimes I know techniques that I haven’t touched for a while and when I see them again I go ‘oh yes that’s right.’

HSC marking would be good for that. I apply for HSC marking every year but I put textiles as my third choice and I never get it. I’m always scared to put textiles up number one because I know I’ll get DT and I need marking each year, not only for the money but for the professional development and support. That’s another place I learn things – at marking. I’ve been told how hard it is to get picked for textiles and the first two years I ever applied as a fresh marker I put textiles first and I never got in so I felt I really didn’t want to risk it and changed my preferences around but I would really like to do textiles HSC marking for sure.

It’s not that I really need more help but it’s just the constant contact with ‘textilie’ people you always pick something up. It’s not like I’m desperate. Like we used to have Home Ec. support networks but we don’t have those for textiles or Home Ec. any more and the old ‘we do it this way’ or ‘this is what we buy from this place’- the tiny little valuable snippets of information.

Marjorie has an awareness of the need to stay current and realises the value of a network of teachers and feels a loss in the degree of local teacher involvement since the change from home economics to technology in the schools. Her region has the highest number of textiles and Design enrolments and is considered one of the better regions for the variety of materials and quality available yet she would like more support how to source materials and resources.

Louise  So you feel quite confident of the theory you teach to HSC students?

Marjorie  I am a little panicked about my year 12s. I am not sure about some aspects of the course.

I had to ring The Board about washable webs. I’ve never felt so insecure about delivering content before, even though I know it, the performance of textiles, its more the Australian textile industry. I was so lost in that it was unbelievable and innovation and the emerging textiles - I was completely lost in that. I did find things and did put together the work but I’m always wondering ‘was that right, was that sufficient?’

I’ve had my range of results – some students in band 6 so I don’t think I’m doing it wrong. I just think that of all the subjects I deliver I find too little of the written support material of the theory of the textiles. Like I like to see things in black and white: ‘oh yeah I’m doing it that way that is pretty good. I’m on the right track.’

I feel very capable but there is still so much I do not know.

There is no prescriptive text for HSC Textiles and Design and it has been said before that not having a text to follow increase the insecurity the teachers feel about delivering the subject.

Marjorie  I have the CD on the TCFL industry that is very valuable but it only covers the preliminary course and I’ve been to a couple, in fact the notes that I have on textile innovations are from a conference that I went to in the holidays at The Australian Catholic University. I learnt about digital printing there from the presentation by Longina Philips. Getting the time to learn about the industry things and those emerging things, it
was brilliant to have those opportunities to go to. You couldn’t teach this subject and not go to those things, that’s my opinion.

It is evident that Marjorie knows the value of continually updating herself and is proactive in this regard. She highlights the necessity for all HSC Textiles and Design teachers to maintain their ties with industry groups and professional associations.

Marjorie: As far as support, all HSC textiles teachers should be on a data base. Surely that could be obtained through marking because the teachers’ names are on the forms we fill in, supervising teacher, we fill it in and that goes through Richard – whatever his name is, at the Board, he’d have a list. When general school mail comes it either gets thrown in the bin or is handed to the nearest Home Ec. teacher she can lay her hands on and not all the Home Ec. teachers teach textiles or care about it. The DEST email should be the best system anyway. I don’t know what the Catholic and Independent use but I get a lot of information that way.

Louise: Can you tell me what you know about the Quality Teaching Standards? Have you found them valuable in evaluating your own teaching?

Marjorie: Absolutely… the TEA textiles conference… did quality teaching all day. I just walked out of there and I felt like I was in a whirlwind of brilliant ideas and approaches and I came back and I debriefed my staff, ‘this is what we could do etc’. I was excited. Looking at the type of content I was putting forward to the students the level of knowledge… seeing something in black and white… it’s a girl thing I guess… It made it all nice and clear. I loved it, love it. I carry a copy of it in my diary but you get varying responses from the other teachers.

Marjorie’s desire to reflect on her own practice and make her teaching as good as possible is something that excites her. She finds that not all the teachers share her enthusiasm for quality teaching standards. Marjorie continues to give examples of how her professional association motivates her to improve her teaching.

Marjorie: I match that with an inservice I went to with Dr Andrew Martin on motivating your child, matched that with the chunking concept that he does and the two together I just feel like there is so much that I can use because with our prac progressive project type of subject… you have to be embracing all of that or else there is no way they’ll finish. Not all my colleagues agree with me. I did a chunking assessment item where parts of work that could help with the supporting documentation, not the actual supporting documentation - parts like the experimentation and things. I chunked it up under 5 progressive dates and then they handed them up in those 5 progressive dates and the kids said ‘I can’t believe it miss, we can actually use that work’ (not all of it, as some of it was preparation in getting other documentation done). I’m pushing and extending for the deeper knowledge. I don’t do it with everything, it is not easy but I always look and ask if I am getting any closer to that.

But I know that every student completes their project and folio.

Marjorie is trying new things and knowing the benefits for the students. As the teachers stated in the survey, teachers need good management skills, particularly time management skills. Judging by the comment “not all my colleagues agree with me” she does not feel that her enthusiasm is shared or that her colleagues appreciate her attempt to improve standards.

Louise: Do you have any advice on teacher training?
I had a prac student this year and I talked a lot about how she was coming out of Sydney Uni and it concerned me cause I felt when I came out of uni that I was well prepared with the prac and theory skills. I was still a developing teacher, had no idea how to handle classes and manage behaviour, and all of that. I had theory ideas but I was a beginner but the theory of my subjects and the practical in my subjects I was totally ready for and I felt that my fourth year prac teacher this year, she was a good kid and she’d done textiles at TAFE and she was a mature age student at Sydney so she had quite a bit of textile knowledge but nothing in design and technology. But she was trained to teach both, and was freaking out teaching, not just because she was teaching for the first time and acquiring those practical classroom skills, but her content was bare minimal so I guess if they are going to come out trained they have to come out with what we used to come out with. The proper textile science, textile arts, the theory and the prac. experience has to happen in the university.

Marjorie reinforced the opinion that Millie described as concern for the teacher training and their lack of confidence in their content knowledge and practical experience. Marjorie indicated that it is not only the Head Teachers and the teachers’ colleagues that are worried, the teachers are “freaking out [about] teaching” with their limited knowledge.

I had one ex student who did the Catholic Uni course and she was very confident with her prac so I don’t know what they do there but she was confident. You’ve got to have the foundations in the uni, you’ve got to do your pattern drafting and sewing and fibre properties and all of that at uni.

The current trend in teacher training is to encourage students to complete technical training before entering university or having the students study concurrently at a technical college to complete the textiles component of the course. The problem with technical training is that the content knowledge on the properties and performance of textiles is very basic and does not provide the detail that is required to analyse fabrics to decide on the most appropriate choice for the end use or determine the care instructions. Technical training provides very good practical skills if the students are committed to quality. It also provides very good pattern making skills that very few universities still offer.

Do you recommend textile teaching to your students?

It’s hard when you say recommend because I don’t say ‘hey everyone become a textile teacher’ because I know that being a teacher you’ve got to have a passion for it or else you just become one of those lumps that just sit in the staffroom but I have got three ex-students who are doing teaching. One is a graduate already from the Catholic Uni, one is at the Catholic Uni at the moment doing DT, no, two of them are at the Catholic Uni doing DT. So I’ve had three ex-students who have gone into it and I’ve chatted to one or two in this year’s group. But I selectively chat to people that have that possibility, personality and passion... And I also take them to The Whitehouse. I’ve got three ex-students that are on scholarship programs there. I encourage that there are a lot of careers in textiles. I take them to Sea Follies so that they can see that not everyone is trained in textiles. Some, they are graphic designers or accountants but they are in the industry so I try to push that.
Maude
Maude has been teaching for 28 years and has recently transferred from an all-girls school to a coeducational school as Head Teacher. She has a passion for textiles and belongs to the Australian Sewing Guild. Maude had little knowledge of textiles from secondary school and so she commenced teaching with a preference to teach home science.

Louise       Please tell me about being a textiles teacher in a coeducational school.

Maude       Basically looking at the HSC you are… teaching toward an exam which in some ways… stifles some of the things you would like to do and you really got to watch the time more than anything else. That’s probably the big thing - is that you got to make sure that the activities and the things that you do with the students you can’t waste any time because you are teaching. Even if you want to spend a little bit more time you can’t do that. That would be the difference between, for example, teaching in the junior school, you only have this amount of time to get through what has to be examined.

This is a very different response to Marjorie and reflects more the ‘getting the job done’ mentality rather than finding ways around the limitations that the HSC examination sets. It also focuses on the importance of time management and the responsibility the teacher feels regarding her contribution to the students’ final result.

Louise       What strategies have you found useful in teaching textiles?

Maude         I personally make all my own clothes and I think that that is a secret because you are keeping up to date with the latest because you’re doing it yourself. You’re not losing your own skills. But for the HSC I felt I needed to broaden my skills and so therefore I had to become more familiar with more techniques like quilting, textile arts - like machine embroidery, and one of the support networks that I found was through the Australian Sewing Guild. I’ve joined that, which is basically a group of people who are not necessarily teachers that meet once a month and have inservice training. For example, we had a class with Angie Zimmerman who went through the techniques of tailoring. I just went and attended a conference in Adelaide and did some wonderful work with cutwork. We did both the traditional hand cutwork and beading and button making and a full range of things that extended my range of skills that I could bring back to the students to share with them and I think that is what you have to do so that you are really immersed and really involved instead of just saying ‘oh well that will do.’ There are so many things that you can do- bobbin work. That was really fascinating and keeping up to date … [Australian Sewing Guild workshops are] a very good source of support. The other one has been HSC marking. And that is making sure that you know how they allocate marks and… [become] very familiar with the marking criteria and you know that you are giving the students the right information.

The suggestion that teachers make their own clothes is a good one. For the teachers who are passionate about textiles but have few skills it is an opportunity to develop those skills. Believing they can make the clothes would be assisting them with their confidence level and of course the confidence that the students have in the teacher, knowing they are wearing what they made. This was reinforced by a comment Maude made later in the interview. Maude, like Marjorie, has discovered the benefits of
attending professional association workshops, knowing that there is something new to
teach and take back to the students. It is important for teachers to stay motivated if
they are going to stay in the teaching service (Grant and Murray, 1999; Voke, 2003;
Saffold, 2003). The value of HSC marking was reported regularly but as Marjorie
stated, it is difficult to gain a position in practical marking.

Louise Are there any other professional associations that support your teaching?

Maude Yes, TEA. They do it through their conferences only and we have a lot of support but
you will find that we used to have our local association here and I was the President of
that. But unfortunately, because of the insurance situation, we had to close down because
we couldn’t run enough workshops to basically cover the cost of the insurance… we were
hoping to affiliate as a member of TEA as an outpost because that way we could bypass
the insurance situation. …This year we’ve had an inservice at least one each term and
we’ve had people like Sue Neill[ from Butterick and Stitches Magazine] come in and talk
about different techniques and would make the afternoon a lot more interesting and they
were things we could take into the classroom and we had the Australian textile industry
people come in and that was important.

Teachers appreciate activities that have a direct link to the classroom. As Marjorie
suggested, they motivate the teachers and keep them aware of new techniques that the
students will enjoy. In talking about the TEA, Maude mentioned the Texstyle
exhibition. This is an exhibition of students’ work chosen from the major textiles
projects submitted for the HSC. The TEA runs workshops in association with the
exhibition and the Year 11 students can go in and look through the portfolios
submitted with the projects and hear presenters talking about the techniques used in
the projects by current HSC teachers. The workshops also discuss time management
techniques.

Louise How could you see support for the HSC being improved?

Maude As a marker, a couple of things that we see basically a lot of finishing things like zippers
and buttonholes or quite a few teachers out there who are design and technology teachers
who are unable to teach textiles to show people the real difference between the two
courses because with textiles you really have an inspiration like in design and technology.
But it is to be textiles. It doesn’t necessarily [have to] be started from scratch and it
doesn’t have to be something innovative and over the top. You have to remember that
17-year-old students don’t have those skills and they only come over time, those sort of
things. making sure that teachers that don’t really know how and are struggling to finish
off garments and teaching them a number of techniques it might be machine embroidery
or embellishments like printing that type of thing those are the sorts of things and
unfortunately what I saw at the last HSC marking was glued on beads. No we have to let
them know that is not textiles. If they are going to do beading they have to be sewn on
and we have to make sure that the skills of the teachers are up to the task.

Maude has not long been head of the technology department with young creative
teachers who have been teaching HSC Textiles and Design and her decision has been
to take the classes herself to improve the students’ chances of success. In the light of
what was happening in the department at the time, this comment was reflecting a
similar sentiment to that of Mille that the technology trained teachers do not have the
skills of the teachers who graduated through home economics teacher training. In relation to quality, it is interesting to note from Maude’s next comments that she believes the skills can be developed in Year 11 if students have not completed textiles in the junior years. This view contradicts the view that the student teachers can’t develop the skills in a similar time frame.

Louise            Do you think the message is getting out about the quality expected of HSC projects?

Maude            Yes they are getting the message because we all commented [HSC examiners] this year that the standard has increased. The folios especially have improved and we have even noticed the quality of the garments has improved. It was reasonably high when we started but there are a number of textiles teachers out there who have said this is what we want and making 50% of the assessment practical was the best thing for the subject. ... It doesn’t matter if they have done textiles in 9 and 10. By the time they get to 11 and 12 you can not tell the difference. I have even had an HSC student who made it to the TexStyle Exhibition who had not done textiles in Yrs 9 and 10. She just happened to like textiles in 7 and 8 and couldn’t get into the textiles class or it wasn’t offered in 9 and 10 and she was wanting to do it and got into year 11 and did a beautiful job. I think it’s a level of maturity, that they just reach a point when their skills are really quite good. You know when you first start off, I mean the course is really written so that you basically have to teach the basic techniques when you start out so that even students who have never done textiles before can manage it quite well.

Maude is describing the expectations that have influenced the improved quality standard and may not have considered that the same expectation could be held for teachers teaching in the area. If students can develop the skills in such a short time frame, new teachers who are encouraged to develop their skills should also be able to do so in a short time frame. Maude’s comments following describe her own textiles experiences as a young teacher.

Louise         Thinking back on your own early teaching years, did you feel well prepared for teaching?

Maude        Yes, I think so. I was actually in a group that didn’t have any previous textiles experience when we started college, but the teacher we had was brilliant. She used to bring in her own samples and she would show us the types of things that were achievable and she was very very encouraging. We actually did quite well ... even though we had no textile background ... when we came out I didn’t teach seniors ... just junior textiles and quite enjoyed that and moved on from there to senior textiles. I think I had good basic skills when I first came out and then basically I improved but then on the other hand I had a lot of support people where I was and those were the days when you made babies’ dresses and I’d never made one of those before and I actually did a lot of work in my own time and my head teacher helped me a lot and made me do babies dresses and fine embroidery and that sort of thing and in the mean time I kept on making clothes for myself.
Maybe the role of head teacher has become quite administrative or the head teachers forget what support they needed themselves as young teachers. The comment that highlighted the value of textiles to her follows:

*It awakened a very creative passion. I loved it. Basically I was thrown in the deep end and told you are going to teach textiles and I said all right, OK that’s it. In those days you didn’t question, you just went out and did it. You couldn’t turn around and say ‘I can’t do this.’ It was an expectation that you just get in and get on with it and I’ve just loved it ever since.*

Increasingly it is becoming clear that the current young teachers are doing just that but textiles teaching in secondary schools has been dominated by the experienced teachers for quite some time. As Millie suggested there are no young teachers coming out and so these teachers are less tolerant of the young inexperienced teachers when they do encounter them. Keen to gain insights into what this teacher would expect the minimum requirement to be I asked the following question:-

**Louise** What advice would you give about teacher training and the minimum requirement for a graduate who will teach textiles?

**Maude** I would say it would be a good idea for them to have covered obviously your textile science, with a your fibre yarn and fabric, a good knowledge of that. The other side of it of course is the practical skills. I think at least a good background in pattern construction - make a couple of garments and possibly a little bit of the textile arts. The rest is really up to them … for me, it is a creative outlet… if I don’t sew I have withdrawals and I am quite passionate about it. Even in the classroom I will have as much fun as the kids are having… when you’re teaching textiles it is not something that you ever stop - always looking for something…But I think the other aspect of it… is the way you present yourself at work because I do make all my own clothes and after a while they realise that you can make things that do not look as though they have been home made. And I think by presenting yourself like that it makes the students feel confident in what you are teaching them. Because I think textiles is a lot about confidence.

The confidence that Maude talks about is demonstrated in the following comment about not needing good drawing skills.

**Maude** With drawing I don’t think teachers have to be brilliant because it is a great excursion to go to The Whitehouse School and leave it to the experts and I am a big believer in getting out and seeing the big world because you will see kids learn even better if you take them outside the school. Someone else can teach them and they think it is wonderful. Well, you could probably teach them too, but the parents think its wonderful. They get a certificate and they have quite a few examples of illustration when they come back and the Whitehouse is wonderful because they give each student the opportunity to win $300 worth of further workshops so that they can go back and have a week of workshops for free.

A confident teacher will always find ways to highlight their strength and compensate for their inadequacies but also not feel threatened by the fact that there are people who can teach things to the students better than they can teach them. Several teachers have...
commented on how beneficial The Whitehouse Institute is for teaching fashion illustration. Illustration is important for the students’ folios and if they are more confident about their drawing they can enjoy the experience. One of the most valuable quotes in the study came as a result of the next question.

Louise  Is there anything else you wanted to say reflecting on your teaching and the importance of textiles in the school?

Maude  It is quite interesting because I think textiles is still very much a girls’ subject and I am not going to make any apologies for that. I think it is actually quite good because a lot of females through textiles often learn to value the skills that they bring, not necessarily for a career but they are certainly life skills, also expressions of creativity… Many times it is another way of meeting other people, as it is a huge world out there who really do textiles and I’m just starting to tap into it myself. But the friendships that you make in these sort of groups are growing quite large now and it is interesting for me to meet these people who are terribly passionate. Even when you go along to the craft shows you can see how huge and the young people who are desperate to find an interest that is creative and constructive and there are not that many that you can look at outside of sport. But I don’t make apologies about not having boys in the class. I really do think it is a way of coming in contact to share the skills that have been handed down.

A lot of the ethnic/migrant girls where textiles was fairly strong in their family. In many cases it is one of the few areas where they have contact with the school and show that they can contribute. When we do the value of textiles I do it as an assessment task and I ask them to bring in a textile item from home and it is interesting what students will actually bring in from home and they bring in something from their own culture and what it actually means to them. Every year I am blown away by the things that the students bring in. It tells about themselves and has much more value than just the practical application to a cultural or even historical value that brings. It is actually fascinating to see what sort of contribution these students who may be very very quiet and all of a sudden they just sort of blossom! I know an example I can give you of a student that I had this year who was very quiet and very poor, from an island off the Philippines and she brought in her national costume to share with the class. That was just beautiful and she probably spoke more in that one lesson in her speech than she had all year and she has really developed a lot of confidence showing me what it was all about, that it was a dancing costume, and it was only handed down once they reached a certain age and it was a rite of passage, I thought ‘well, she has really come out of her little shell’ because she thought for the first time she had something to contribute - that what she had to say was really important and she was very proud of so there are lots of different layers. It doesn’t just have to be that practical side of handing in something for the HSC.

Maude’s testimonial to the value of textiles was far more than her closing comments.

Maude started home economics teacher training with her background in home science and became “turned on” to textiles at teachers’ college. The perception that the older teachers are the only ones who can teach textiles properly is flawed. Admittedly her passion was awakened by a teacher she described as “brilliant” and “very very encouraging.” The teacher/student relationship is strengthened by encouragement and a characteristic that student teachers listed as a top priority.

Marlene
Marlene commenced her career in secondary school teaching after her children were back at school. She had worked as a Fashion teacher in TAFE before starting a family. Marlene has been teaching in an independent girls school for 15 years and shares the senior textiles teaching with her Head Teacher. There are four other teachers in the technology department.

Marlene  Being an all-girls school we have quite large classes of girls doing textiles going from year 9 to year 12. This year for the first time we have two classes in year 11 and that will go up to two classes in year 12 next year. I’ve been teaching year 12 myself this year and I have been alternating between 11 and 12 with the head of department and I’ve been doing this for about 4 years now.

I have taught year 9 and 10 textiles for the last 12 or 13 years but as I have had other tutoring in the school for the last 3 years I only teach senior textiles and mandatory technology in years 7 and 8. We have a few young teachers who will teach textile type units in technology in years 7 and 8 but not confident textile teachers for 9 and 10 even.

Marlene’s comments indicate the strength of textiles in the school and the notion that textiles is increasing in popularity. I was keen to explore the issue of young textiles teachers developing their textiles skills to build their confidence so that they can take on the role of teaching HSC textiles when the older more experienced teachers retire.

Louise  Do the young teachers seek support for their textiles teaching?

Marlene  Yes they do. I probably give them more support than anyone else to be quite honest. Helping them in the classroom, sometimes if they are feeling a bit overwhelmed. I taught a couple this year how to use the sewing machine and… got them started doing little tops and stuff. One in particular made a little top for herself so that she has a bit more and feels a little more confident in the classroom. Some of them pick it up better than others but over the years, the last five or six years I probably have helped five or six young teachers to teach textiles.

It is good to hear that Marlene is a teacher much like the supportive teachers who helped the careers of Millie, Marjory and Maude. Helping them in a very practical way with simple items of clothing that they can wear and can show the students what they have made.

Louise  Are they motivated to finding support for their textiles teaching outside the school?

Marlene  No I don’t think so at the moment. I think they are just doing it because they have to do it. I don’t think they totally dislike it or anything like that. I don’t know that they have the interest, if you put it that way, but one of them working on year 8 at the moment, … working on teeshirts has said to me that she would like to take a sewing machine home in the holidays and I said yes ‘that would be a very good idea’ so she may well pick it up a bit but I can’t imagine that she will get to the stage of doing any more outside school, though she does things like hand needlework, that kind of stuff. You often see her doing a bit of cross stitch, that kind of thing a bit of a hobby. She may take to textiles - a bit more but not to do HSC textiles.
Like Millie and Maude, Marlene doesn’t have much faith in the ability of the young teachers to improve their knowledge of textiles to a level that would make them suitable to teach HSC textiles. Marlene downplayed the interest that the young teacher had in cross stitch and her desire to take a machine home over the holidays. The comments also reinforce the view that the young teachers have not changed as much as Maude suggested when she said in the days that she was a young teacher you did things that you had to without argument. Marlene is saying that in her opinion the teachers are “just doing it because they have to.” Maude was suggesting that young teachers would not do that today with the comment “in those days you didn’t question, you just went out and did it. You couldn’t turn around and say I can’t do this.” Exploring the issue of the development of the young teachers further I asked

Louise What do you think would need to happen for them to be ready to teach HSC textiles?

Marlene Oh gosh, they’re a long way from that. These youngies that I know anyhow. I can’t imagine that they would ever want to do that. They’ve really had minimal learning experience before they’ve come here or unless they really took to it and did extra classes after work. They are a long way off having the experience, to be quite honest and I think you have to have a bit of a real love, that type of thing, to start with because if they don’t it doesn’t hold their interest. This little one that is borrowing the machine in the holidays might have a bit of fun making herself a top or something but she is going to be a long way off being able to put together an evening dress or something like that – a long way off.

Marlene is referring to the motivation that drives people to achieve beyond the expectations of others. The passion that Millie and Maude talk about that they have and the passion that has been demonstrated in many young teachers that I have met during the study. My next question related to the gaps in knowledge Marlene may have experienced with her transition from TAFE teaching to secondary school teaching.

Louise What differences did you find in the content you taught in fashion at TAFE compared to secondary school?

Marlene I did start off just teaching juniors but some of the content on textiles, properties and performance of textiles … that was probably something I hadn’t really dealt with properly myself, at TAFE college days or teacher training days because I dealt with pattern making, designing and garment making,…but it wasn’t that hard for me to get back into it. I didn’t find it stressful or anything. In fact, I probably do a lot of research and trying to keep up to date, so that probably having that inquisitive nature, I think that probably helps.

Marlene is again demonstrating that her confidence in teaching and motivation can overcome the gaps in her learning. The area of properties and performance is not covered well in TAFE teachers completing fashion training with TAFE, instead of a specialisation in textiles at university, may have a weakness in their teaching of the properties and performance of textiles. Marlene’s observation regarding the different capabilities of teachers, that follows, is quite enlightening.
Marlene  I know teachers who have not had the same background as me that teach HSC textiles and they just approach it in a different manner. Some younger teachers just have a way of encouraging their students to explore and act more as facilitators than teachers just to help them complete something. To complete something that is well made with a classy finish they really need knowledge and skill.

Louise  Can you give me an example where a young teacher may have limited skills but they have made quite an impact in the classroom?

Marlene  Megan O'Sullivan or Meagan Brown at Stella Maris and she seems to enthuse students. I know that when I first started teaching the students I got a few hints from her. I don’t really know what background she had in textiles but she would be a younger teacher that impressed me.

Marlene accepts that teachers who may not have highly developed skills can compensate with the support they give their students through their enthusiastic approach. It is wonderful when a young teacher can offer the experienced teachers something back and particularly wonderful when the experienced teachers actually believe that the young teachers have something to contribute.

The next two teachers interviewed are teachers in their second year of teaching who are trying to teach textiles without any formal training.

Meredith  Meredith is a young design and technology teacher in a country high school in the Hunter Region. She completed a technology teaching degree with a specialisation in wood and metal. She was brought to my attention by older more experienced teachers who spoke of her passion and the marvellous work produced by her students.

Louise  How did you come to be teaching textiles?

Meredith  I guess the gender stereotype may have had something to do with it. I was a young female teacher appointed to a coed school that had just lost their textiles teacher and no one else wanted to do it. My head teacher just gave it to me on my timetable. I had never really thought ‘I don’t like sewing’, but I had never had the chance to learn, so the first thing I did was find someone who could teach me. I didn’t know what to do with the kids or anything, but Marianne was great. I don’t know what I would have done without Marianne and TEA.

This account contradicts the opinions of experienced teachers that the new young ones would not teach textiles if it was not part of their training. Marianne is a passionate teacher from another school in her area that she came to meet through TEA. Marianne shared her programs and taught her what she needed to complete a unit in the Mandatory Technology Syllabus on textiles. She did know how to use the sewing machine. She participated in a sewing unit when she was in Year 7.

Meredith  I didn’t really know if I was doing it right. I just did what Marianne told me to do and
when my students put their cushions into the textiles exhibition all these teachers came up to me and said wow! So then I knew I was doing OK. I really enjoy all the textiles stuff now. I go to all the workshops on dyeing and machine embroidery and whatever I can find. I love it.

Meredith is another example of a teacher who was incidentally touched by textiles and in the current climate of revitalization it is clear that there is an abundance of support for her efforts. The encouragement and approval that she received from the more experienced teachers gave her the confidence to continue.

Louise Could you see yourself ever teaching Textiles and Design at HSC level?

Meredith Well my school is only a junior high school now so I don’t have to think about that but after I have been teaching junior textiles technology for a few years and I get a school that has HSC Textiles and Design I would consider it, if there was someone there to help me. I would really like to get some elective classes up to year 9.

The future of textiles education in secondary schools will rely on the support systems available to enthusiastic young teachers and sometimes all they need is an encouraging voice letting them know they can do it.

Molly

Molly turned to teaching when she started a family. She had worked as a chef for five years and realised it was not a career that she could maintain as a mother. When her child was three she applied to the Accelerated Teacher Program offered by the Department of Education and Training through Sydney University. Part of that retraining program was a brief 30-hour course on textiles sewing skills conducted by Millie at her high school. Molly found Millie’s enthusiasm for textiles contagious and found herself hoping for opportunities to use her new found sewing skills. She enjoyed making a quilt for her son. When Mollie completed her training she was appointed to a junior high school in the Metropolitan West Region. Mollie ‘phoned me requesting assistance with the development of sewing skills in preparation for a unit of work for her Year 7 class. She wanted to make a few articles that she could display in her technology classroom to create some interest in the unit she had planned for later in the year. She was concerned that the students should be making things that they could use and be proud of.

Louise What was your motivation to want to teach textiles technology?

Molly Sewing is fun. Sure, the kids like cooking, too, but it is more to eat than anything else. Sewing is about the product and having something to show for your efforts. With cooking you eat it and it’s gone. All you have left is the mess to clean up, and the kids
aren’t good at the cleaning up part. When they made their pencil cases with reverse appliqué details on it and a zip across the top they were very proud of them and they couldn’t wait to put their pencils inside.

This was an interesting perspective as I have heard teachers say they prefer to teach food technology because “at least at the end of the lesson if the kids make a mistake they can just throw it in the bin. With textiles a mistake from one lesson comes back the next.”

Louise Did you have any trouble getting the students to bring their materials

Molly No, the materials were donated so they had a choice of furnishing fabrics and their technology fees covered the cost of the zippers. I kept their work in the storeroom until it was finished. I wouldn’t let them take them home until they were finished.

I was very impressed by Meredith’s organisational skills and capability to anticipate problems that she may encounter in the production of the textile item. With teachers commenting on the cost of textiles, Meredith has already found a way of overcoming the problem by finding a manufacture who gives her fabric off cuts.

Molly applied and was accepted for the funded retraining program offered by the Department of Education and Training at The Whitehouse Institute with a Graduate Certificate in Textiles and Design Teaching from Southern Cross University. There have been twenty participants accepted for the course and include visual arts teachers and technology teachers who do not have qualifications to teach textiles to HSC level.