



# **Textiles Technology Years 7–10**

## **Syllabus**

June 2003

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# 1 Introduction

## 1.1 The K–10 Curriculum

This syllabus has been developed within the parameters set by the Board of Studies NSW in its *K–10 Curriculum Framework*. This framework ensures that K–10 syllabuses and curriculum requirements are designed to provide educational opportunities that:

- engage and challenge all students to maximise their individual talents and capabilities for lifelong learning
- enable all students to develop positive self-concepts and their capacity to establish and maintain safe, healthy and rewarding lives
- prepare all students for effective and responsible participation in their society, taking account of moral, ethical and spiritual considerations
- encourage and enable all students to enjoy learning, and to be self-motivated, reflective, competent learners who will be able to take part in further study, work or training
- promote a fair and just society that values diversity
- promote continuity and coherence of learning, and facilitate the transition between primary and secondary schooling.

The framework also provides a set of broad learning outcomes that summarise the knowledge, understanding, skills, values and attitudes essential for all students to succeed in and beyond their schooling. These broad learning outcomes indicate that students will:

- understand, develop and communicate ideas and information
- access, analyse, evaluate and use information from a variety of sources
- work collaboratively with others to achieve individual and collective goals
- possess the knowledge and skills necessary to maintain a safe and healthy lifestyle
- understand and appreciate the physical, biological and technological world and make responsible and informed decisions in relation to their world
- understand and appreciate social, cultural, geographical and historical contexts, and participate as active and informed citizens
- express themselves through creative activity and engage with the artistic, cultural and intellectual work of others
- understand and apply a variety of analytical and creative techniques to solve problems
- understand, interpret and apply concepts related to numerical and spatial patterns, structures and relationships
- be productive, creative and confident in the use of technology and understand the impact of technology on society
- understand the work environment and be equipped with the knowledge, understanding and skills to evaluate potential career options and pathways
- develop a system of personal values based on their understanding of moral, ethical and spiritual matters.

The ways in which learning in the *Textiles Technology Years 7–10 Syllabus* contributes to the curriculum and to the student's achievement of the broad learning outcomes are outlined in the syllabus rationale.

In accordance with the *K–10 Curriculum Framework*, the *Textiles Technology Years 7–10 Syllabus* takes into account the diverse needs of all students. It identifies essential knowledge, understanding, skills, values and attitudes. It enunciates clear standards of what students are expected to know and be able to do in Years 7–10. It provides structures and processes by

which teachers can provide continuity of study for all students, particularly to ensure successful transition through Years 5 to 8 and from Year 10 to Year 11.

The syllabus also assists students to maximise their achievement in Textiles Technology through the acquisition of additional knowledge, understanding, skills, values and attitudes. It contains advice to assist teachers to program learning for those students who have gone beyond achieving the outcomes through their study of the essential content.

## **1.2 Students with Special Education Needs**

In the K–6 curriculum, students with special education needs are provided for in the following ways:

- through the inclusion of outcomes and content in syllabuses which provide for the full range of students
- through the development of additional advice and programming support for teachers to assist students to access the outcomes of the syllabus
- through the development of specific support documents for students with special education needs
- through teachers and parents planning together to ensure that syllabus outcomes and content reflect the learning needs and priorities of students.

Students with special education needs build on their achievements in K–6 as they progress through their secondary study and undertake courses to meet the requirements for the School Certificate.

It is necessary to continue focusing on the needs, interests and abilities of each student when planning a program for secondary schooling. The program will comprise the most appropriate combination of courses, outcomes and content available.

### **Life Skills**

For most students with special education needs, the outcomes and content in sections 6 and 7 of this syllabus will be appropriate but for a small percentage of these students, particularly those with an intellectual disability, it may be determined that these outcomes and content are not appropriate. For these students the Life Skills outcomes and content in section 8 and the Life Skills assessment advice below can provide the basis for developing a relevant and meaningful program.

### **Access to Life Skills outcomes and content in Years 7–10**

A decision to allow a student to access the Textiles Technology Years 7–10 Life Skills outcomes and content should include parents/carers and be based on careful consideration of the student's competencies and learning needs.

The decision should establish that the outcomes and content in sections 6 and 7 of the *Textiles Technology Years 7–10 Syllabus* are not appropriate to meet the needs of the student. Consideration should be given to whether modifications to programs and to teaching, including adjustments to learning activities and assessment, would enable the student to access the syllabus outcomes and content.

As part of the decision to allow a student to access the Textiles Technology Years 7–10 Life Skills outcomes and content, it is important to identify relevant settings, strategies and resource requirements that will assist in the learning process. Clear time frames and strategies for monitoring progress, relevant to the age of the student, need to be identified and collaborative plans should be made for future needs.

It is not necessary to seek permission of the Office of the Board of Studies for students to undertake the Textiles Technology Years 7–10 Life Skills outcomes and content, nor is it necessary to submit planning documentation.

### **Life Skills assessment**

Each student undertaking a Textiles Technology Years 7–10 Life Skills course will have specified outcomes and content to be studied. The syllabus content listed for each outcome forms the basis of learning opportunities for students.

Assessment should provide opportunities for students to demonstrate achievement in relation to the outcomes and to generalise their knowledge, understanding and skills across a range of situations or environments including the school and the wider community.

Students may demonstrate achievement in relation to Textiles Technology Years 7–10 Life Skills outcomes independently or with support. The type of support will vary according to the particular needs of the student and the requirements of the activity. Examples of support may include:

- the provision of extra time
- physical and/or verbal assistance from others
- the provision of technological aids.

## **2 Rationale**

Textiles Technology will contribute to the overall education of students by enabling them to confidently use a range of technologies and create an awareness of related career pathways and leisure pursuits. The course encourages students to be proactive, competent, creative, responsible and reflective learners able to take part in further study, work or training.

Textiles have played a significant role throughout human history, satisfying both functional and aesthetic needs. Textiles continue to satisfy needs in society by being a means of self-expression, by having social meaning and cultural significance, and by performing specific functions in commercial, industrial and personal settings.

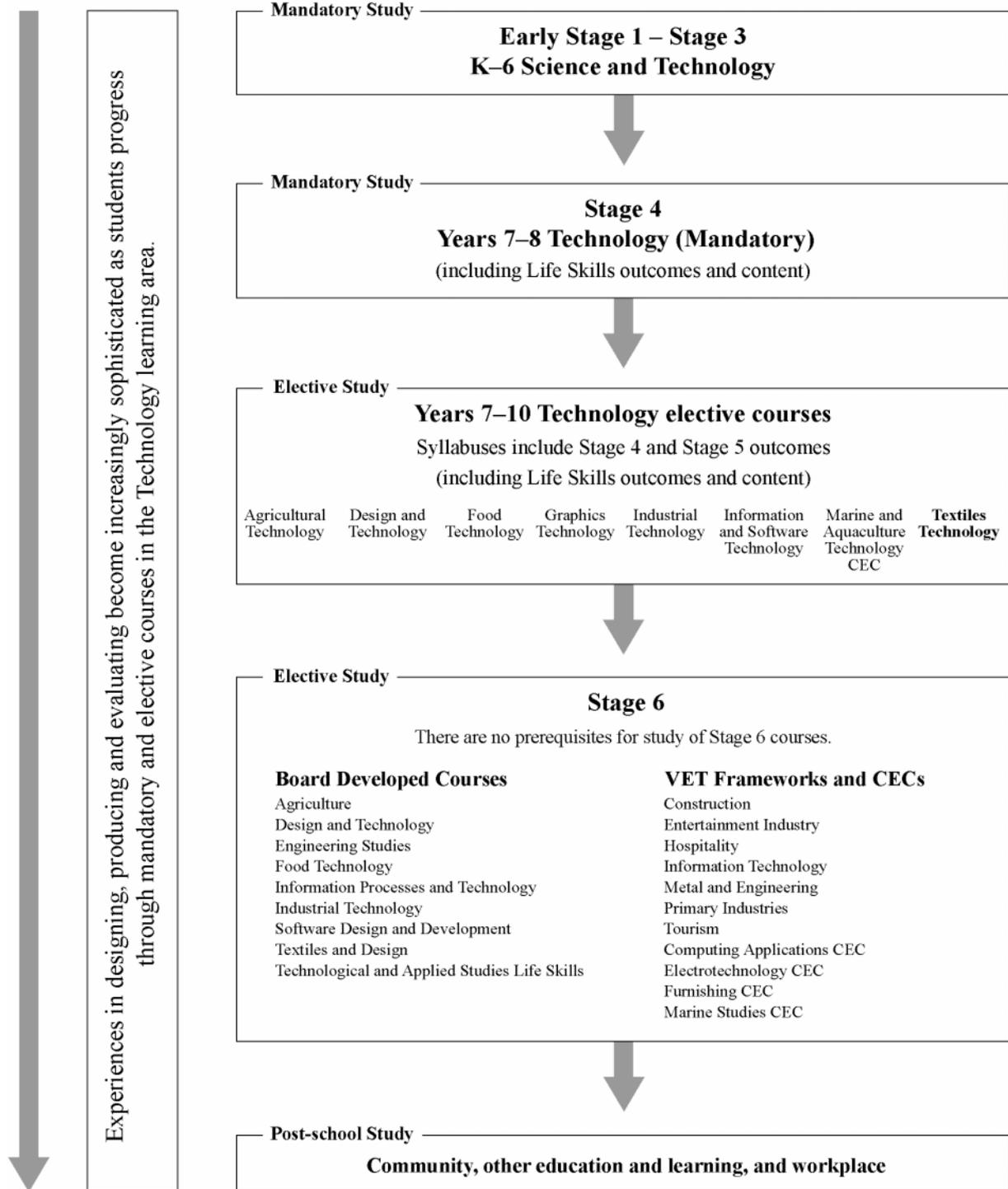
Textiles Technology acknowledges and embraces an understanding of cultural diversity by examining the ways in which different groups have used textiles as an expressive and functional medium. These historical and cultural uses of textiles continue to influence contemporary designers today and students will examine design features characteristic of a variety of different cultures and use them as sources of inspiration in textile projects where appropriate.

A study of Textiles Technology provides students with broad knowledge of the properties, performance and uses of textiles in which fabrics, colouration, yarns and fibres are explored. Project Work that includes investigation and experimentation will enable students to discriminate in their choices of textiles for particular uses. Students will document and communicate their design ideas and experiences and make use of contemporary technology in their project work. Completion of projects is integral to developing skills and confidence in the manipulation and use of a range of textile materials, equipment and techniques.

Students will investigate the work of textile designers and from this research make judgments about the appropriateness of design ideas, the selection of materials and of tools and the quality of textile items. Students will be challenged to transfer knowledge to new situations and projects, building on technical skills and past experiences. Textile projects will give students the opportunity to be creative, independent learners and to explore functional and aesthetic aspects of textiles, demonstrate responsibility in decision-making and encourage individuals to express ideas and opinions.

Students will develop an appreciation of the factors affecting them as textile consumers. Current technologies and innovations that continue to emerge in the textile industry will be addressed with emphasis on their economic, social and environmental consequences.

### 3 The Place of the Textiles Technology Years 7–10 Syllabus in the Technology K–12 Curriculum



## **4 Aim**

The aim of this syllabus is to develop confidence and proficiency in the design, production and evaluation of textile items. Students will actively engage in learning about the properties and performance of textiles, textile design and the role of textiles in society.

## **5 Objectives**

### **Knowledge, understanding and skills**

Students will develop:

- 1 knowledge and understanding of the properties and performance of textiles
- 2 knowledge and understanding of and skills in design for a range of textile applications
- 3 knowledge, understanding and appreciation of the significant role of textiles for the individual consumer and for society
- 4 skills in the creative documentation, communication and presentation of design ideas
- 5 skills in the critical selection and proficient and creative use of textile materials, equipment and techniques to produce quality textile items
- 6 knowledge and skills to evaluate quality in the design and construction of textile items.

## 6 Outcomes

<b>Objectives</b>	<b>Stage 4 Outcomes</b>	<b>Stage 5 Outcomes</b>
Students will develop:	A student:	A student:
1 knowledge and understanding of the properties and performance of textiles	4.1.1 describes the properties and performance of textile items 4.1.2 suggests appropriate uses for a variety of fabrics, yarns and fibres	5.1.1 explains the properties and performance of a range of textile items 5.1.2 justifies the selection of textile materials for specific end uses
2 knowledge and understanding of and skills in design for a range of textile applications	4.2.1 describes the creative process of design used in the work of textile designers 4.2.2 generates design ideas for textile items 4.2.3 uses methods of colouration and decoration of textile items	5.2.1 explains the creative process of design used in the work of textile designers 5.2.2 generates and develops textile design ideas 5.2.3 investigates and applies methods of colouration and decoration for a range of textile items
3 knowledge, understanding and appreciation of the significant role of textiles for the individual consumer and for society	4.3.1 describes historical, cultural and contemporary perspectives that influence textile design, construction and use 4.3.2 identifies factors affecting consumer demand, selection and use of textiles	5.3.1 analyses the influence of historical, cultural and contemporary perspectives on textile design, construction and use 5.3.2 evaluates the impact of textiles production and use on the individual consumer and society
4 skills in the creative documentation, communication and presentation of design ideas	4.4.1 uses appropriate technology to document, communicate and present design and project work	5.4.1 selects and uses appropriate technology to creatively document, communicate and present design and project work
5 skills in the selection and proficient and creative use of textile materials, equipment and techniques to produce quality textile items	4.5.1 selects and manipulates a range of textile materials 4.5.2 uses techniques and equipment safely in the production of quality textile projects 4.5.3 demonstrates skill in the production of textile projects to completion	5.5.1 critically selects and creatively manipulates a range of textile materials to produce quality textile items 5.5.2 selects appropriate techniques and uses equipment safely in the production of quality textile projects 5.5.3 demonstrates competence in the production of textile projects to completion

<b>Objectives</b>	<b>Stage 4 Outcomes</b>	<b>Stage 5 Outcomes</b>
Students will develop:	A student:	A student:
6 knowledge and skills to evaluate quality in the design and construction of textile items	4.6.1 identifies aspects of quality in the design and construction of textile items	5.6.1 evaluates textile items to determine quality in their design and construction

Stage 4 outcomes have been provided to assist the assessment and reporting of student achievement in those schools that choose to begin elective study before Year 9. Teachers are advised to select from the syllabus content to target the specific needs of students who commence study in Stage 4.

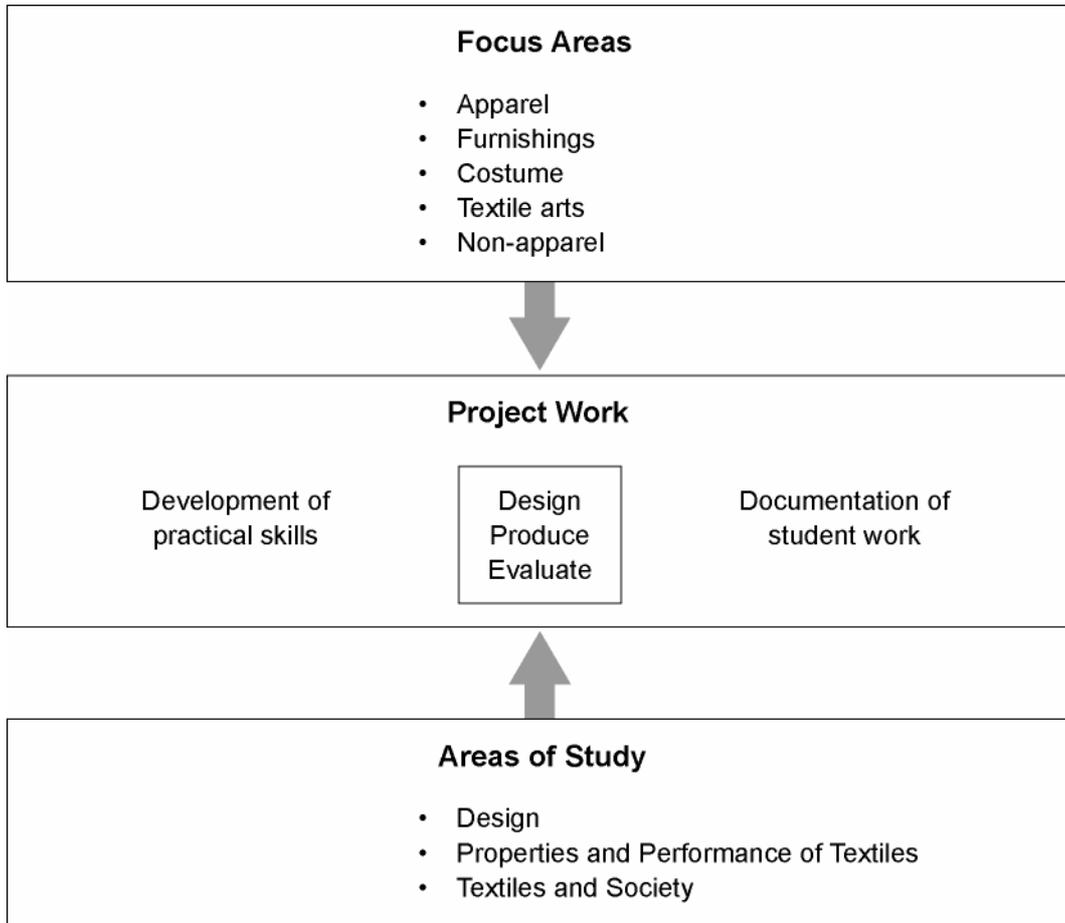
### **Life Skills**

For some students with special education needs, particularly those students with an intellectual disability, it may be determined that the above outcomes are not appropriate. For these students, Life Skills outcomes and content can provide the basis for the development of a relevant and meaningful program – see section 8.

## 7 Content

### 7.1 Organisation of Content

Textiles Technology is an elective course designed to build upon Technology (Mandatory) Years 7–8 at Stage 5. Outcomes for Stage 4 have been included to allow flexibility for those schools who wish to offer the course in Years 7 and 8.



### **Units of Work**

Project work forms the basis of every unit of work. Teachers will select a focus area as a starting point for the development of a unit of work. Appropriate content from project work and areas of study is integrated in creating units of work that meet student needs and interests.

A minimum of two units of work will be completed for the 100-hour course with each unit being developed from a different focus area. A minimum of four units of work will be completed for the 200-hour course, covering a minimum of three focus areas. Units of work in addition to this in either course may revisit focus areas. Units of work that revisit focus areas may be used for extension of student learning. Students can negotiate a project from a focus area of interest with the teacher and work independently.

### **Essential content**

Students undertaking a 100-hour course must complete all content from project work and content from areas of study appropriate to the project and focus area selected. Teachers of the 100-hour course must ensure that all outcomes are addressed when selecting content from the areas of study. Students undertaking the 200-hour course must complete all content in each area of study and project work.

### **Additional content**

Students can move beyond the essential content in order to broaden and deepen their understanding and skills and to extend their interest in particular aspects of Textiles Technology. Additional content is suggested for each area of study.

### **Project Work**

There are two components of project work:

- development of practical skills to produce a textile item
- documentation of student work.

### **Development of practical skills to produce a textile item**

Students will complete a textile item for each unit of work completed, thereby developing practical skills in designing, producing and evaluating. The textile item should be relevant to student needs and interests. It is expected that there will be a gradual increase in the challenge offered to students in project work to enhance the development of practical skills.

### **Documentation of student work**

Students will document project work and show evidence of:

- investigation and research undertaken
- sources of inspiration
- generation and development of ideas
- experimental work
- development of creative design skills
- collection of resources
- producing and evaluating project work.

Students may document project work in a variety of ways which may include a digital portfolio, design folio, diary, journal, workbook or any other appropriate method.

### **Student Negotiated Project Work**

Students may elect to undertake project work in which they may select any focus area of interest and work independently. The scope and nature of the project is to be negotiated with the teacher.

### **Areas of Study**

There are three areas of study:

- Design
- Properties and Performance of Textiles
- Textiles and Society.

The relevant content (learn about/learn to) from each area of study and the project work will be selected and integrated when creating a unit of work.

### **Focus Areas**

Focus areas are recognised fields of textiles that will direct the choice of student projects.

The focus areas are:

- Apparel – includes clothing and accessories such as shoes, hats, jewellery and belts.
- Furnishings – includes cushions, curtains, bedspreads, lampshades, quilt covers, bed linen, chair coverings, table linen, beanbags.
- Costume – includes theatre costumes, masks, headdress, folk and traditional costumes, fancy dress costumes and dance costumes.
- Textile Arts – includes wall hangings, fabric-based artworks, embroidery, wearable design.
- Non-apparel – includes book covers, toys, bags, umbrellas, tents, backpacks, sleeping bags.

Focus areas are intended to encourage students to engage with a range of textile items and cater for a variety of student interests. They provide options for students to refine and enhance their knowledge and understanding of textiles using a variety of materials, tools and techniques.

### **Life Skills**

Outcomes and content are in Section 8.

### **Cross-curriculum content**

Cross-curriculum content assists students to achieve the broad learning outcomes defined in the Board of Studies *K–10 Curriculum Framework*. It is incorporated in the content of the *Textiles Technology Years 7–10 Syllabus* in the following ways:

#### **Information and Communication Technologies (ICT)**

Students engage with a variety of ICT applications when developing design ideas and researching information to support project work. ICTs will be used in the development, modification, production and presentation of individual student projects. In project work, students will use:

- word-processing applications to document the procedure for the construction of a textile project
- multimedia applications in the communication and presentation of design ideas for a variety of audiences

- graphics to communicate sources of inspiration and develop design ideas for textile projects
- electronic communication for the communication and presentation of design ideas, research and investigation of the practice of designers and critical analysis of commercial textile-based websites.

### **Work, Employment and Enterprise**

Students are given opportunities to examine various sectors in the textiles industry, developing knowledge and understanding of the workplace practices, issues, legislation and the changing nature of work within this industry. This content includes specific knowledge and understanding of current employment opportunities. Employment and enterprise skills are developed throughout the course through self-evaluation, projects and practical application of knowledge.

### **Aboriginal and Indigenous**

Students develop knowledge and understanding of Aboriginal and Indigenous cultures as they investigate how these groups use textiles as an expressive and functional medium.

### **Difference and Diversity**

The investigation of textiles acknowledges and embraces an understanding and appreciation of diversity, allowing students to show awareness and acceptance of all people through a study of historical, cultural and contemporary perspectives. Students develop an appreciation of the differences that exist in society and the positive qualities of all people. Students learn about anti-discrimination legislation and equal employment opportunity (EEO) principles through the study of textiles technology work environments.

### **Environment**

Students will examine how textile designers and manufacturers consider environmental issues in the designing and producing of textile items and the impact textile production has on the environment.

### **Gender**

Textiles Technology provides a context for challenging stereotypes about masculinity and femininity. It does this through providing students with an understanding of the contributions made by males and females in the textiles industry.

### **Key Competencies**

Extensive opportunities are provided within Textiles Technology to develop the key competencies. During the course, students:

- source, select and sequence information across all the areas of study and in their project work, developing competence in ***collecting, analysing and organising information***
- debate, describe, discuss and explain textile-related issues in written, visual, graphic and oral form, developing competence in ***communicating ideas and information***
- plan, prepare and present project work for specific focus areas, developing competence in ***planning and organising activities***
- cooperate with individuals and groups during practical activities, developing competence in ***working with others and in teams***
- design, implement and evaluate solutions to textile-based problems, developing competence in ***solving problems***
- plan, develop and modify projects including costing, quantities, measurement and time, developing competence in ***using mathematical ideas and techniques***

- develop practical projects using appropriate equipment, materials and techniques, developing competence in *using technology*.

**Literacy**

In the development of documentation of student work, ideas are communicated in oral, visual, graphic and written forms using textile specific terminology. All areas of study in Textiles Technology provide students with opportunities to compose, acquire and process text.

**Multicultural**

The study of textiles in society provides students with opportunities to explore textiles from a number of different cultures as they examine design characteristics of specific groups. This enhances their understanding, appreciation and acceptance of people from different racial and ethnic backgrounds.

**Numeracy**

Numeracy skills are inherent in the development of all student projects. Measurement, costing and determining quantities of materials are integral parts of project development. Students also gain experience working with spatial concepts when planning project work. This allows them to develop numeracy skills, which are transferable to solving problems encountered in everyday situations.

## 7.2 Content for Years 7–10

### A note to teachers about practical experiences

To satisfy the requirements of the syllabus students must undertake a range of practical experiences that occupy the majority of course time. Practical experiences should be used to develop knowledge and understanding of and skills in designing, producing and evaluating. Student capability, confidence and expertise at their current stage of development is an important consideration in determining the teaching and learning sequences in the course.

In developing and delivering teaching programs teachers should be aware of and adopt the relevant guidelines and directives of their education authorities and/or schools. Teaching programs should recognise and reflect relevant State and Commonwealth legislation, regulations and standards including Occupational Health and Safety, Chemical Safety in Schools and Animal Welfare guidelines. Teachers need to be aware of activities that may require notification, certification, permission, permits and licences.

### Project Work

Completion of projects is integral to developing skills and confidence in the manipulation and use of a range of textile materials, equipment and techniques. Students will learn to design, produce and evaluate textile items across a range of focus areas. Project work gives students the opportunity to develop and refine skills to produce quality textile items. When documenting project work students will show evidence of each of the stages of designing, producing and evaluating.

<p><b>Outcomes</b> A student:</p> <p>5.4.1 selects and uses appropriate technology to creatively document, communicate and present design and project work</p> <p>5.5.1 critically selects and creatively manipulates a range of textile materials to produce quality textile items</p> <p>5.5.2 selects appropriate techniques and uses equipment safely in the production of quality textile projects</p> <p>5.5.3 demonstrates competence in the production of textile projects to completion</p> <p>5.6.1 evaluates textile items to determine quality in their design and construction</p>	
<p><b>Students learn about:</b></p> <p><b>Designing</b></p> <ul style="list-style-type: none"> <li>• sources of inspiration</li> <li>• generating and developing ideas</li> <li>• communication and presentation of design ideas                             <ul style="list-style-type: none"> <li>– visual and graphical</li> <li>– written</li> <li>– verbal</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• identify and creatively document sources of inspiration for a textile project</li> <li>• generate and develop design ideas using sketching and rendering techniques</li> <li>• use a variety of techniques to communicate and present the development of design ideas including Information and Communication Technologies (ICTs)</li> </ul>

<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• selection of appropriate materials</li> </ul> <p><b>Producing</b></p> <ul style="list-style-type: none"> <li>• management of project work</li> <li>• using commercial patterns or simple pattern production <ul style="list-style-type: none"> <li>– notion requirements</li> <li>– fabric requirements</li> <li>– instruction sheet</li> <li>– pattern markings and layout</li> <li>– modification of patterns</li> </ul> </li> <li>• calculating textile requirements considering spatial concepts</li> <li>• sequencing of construction for a textile item</li> <li>• safe use of a variety of textile equipment</li> <li>• techniques such as <ul style="list-style-type: none"> <li>– weaving</li> <li>– felting</li> <li>– knitting</li> <li>– colouration and decoration</li> <li>– joining materials</li> <li>– edge finishes</li> <li>– closures</li> <li>– hems</li> </ul> </li> <li>• labelling requirements of textile items including <ul style="list-style-type: none"> <li>– fibre content</li> <li>– size</li> <li>– country of origin</li> <li>– brand name</li> <li>– care instructions</li> </ul> </li> <li>• swing tag <ul style="list-style-type: none"> <li>– logo</li> <li>– price</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• identify aesthetic and functional performance criteria for textile materials of a textile item</li> <li>• experiment with textile materials to determine which are most appropriate for a textile item</li> <li>• justify the selection of materials for a textile item</li> <li>• plan and organise the stages involved in the design and production of a textile item to ensure quality completion</li> <li>• interpret, modify and use commercial patterns and/or produce simple patterns for a textile item</li> <li>• calculate quantity and cost of requirements for a textile item</li> <li>• plan and document a procedure for the construction of a textile item using a word-processing application</li> <li>• select and safely use textile equipment to construct a quality textile item</li> <li>• experiment with, select and use techniques to ensure quality textile items</li> <li>• identify the labelling requirements of a range of textile items</li> <li>• design and produce a product label and swing tag for textile items produced in project work</li> </ul>
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<p><b>Students learn about:</b></p> <p><b>Evaluating</b></p> <ul style="list-style-type: none"><li>• evaluation of the quality of textile items in relation to<ul style="list-style-type: none"><li>– design</li><li>– functional requirements</li><li>– aesthetic aspects</li><li>– construction</li><li>– fabric selection</li><li>– notions used</li></ul></li></ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"><li>• establish criteria for evaluation of a textiles item</li><li>• evaluate the textile items during designing and producing using techniques such as self-evaluation, peer evaluation</li><li>• use feedback from evaluation to modify project work and ensure a quality result</li></ul>
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**Area of Study: Design**

The content in this area of study is covered through an investigation of the work of textile designers. By examining the practice of textile designers, students can model the work of designers in the production of project work. For the 100-hour course a minimum of one designer is to be studied. For the 200-hour course a minimum of two designers is to be studied.

<p><b>Outcomes</b>                  A student:                  5.2.1 explains the creative process of design used in the work of textile designers                  5.2.2 generates and develops textile design ideas                  5.2.3 investigates and applies methods of colouration and decoration for a range of textile items</p>	
<p><b>Students learn about:</b></p> <p><b>The practice of textile designers</b></p> <ul style="list-style-type: none"> <li>• textiles as a design medium</li> <li>• textile designers across the focus areas</li>   <li>• the creative process when designing with textiles                         <ul style="list-style-type: none"> <li>– researching</li> <li>– observation</li> <li>– brainstorming</li> <li>– sharing of ideas</li> <li>– visualising, generating and developing ideas</li> </ul> </li> <li>• historical, cultural and contemporary sources of inspiration used by textile designers</li>   <li>• features of design in the construction of textile items</li> <li>• elements of design                         <ul style="list-style-type: none"> <li>– line</li> <li>– direction</li> <li>– shape</li> <li>– size</li> <li>– colour</li> <li>– value</li> <li>– texture</li> </ul> </li> <li>• factors affecting design                         <ul style="list-style-type: none"> <li>– functional requirements</li> <li>– aesthetic aspects</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• define design in the textile context</li> <li>• identify textile designers in selected focus areas</li> <li>• explore textile applications across the focus areas</li> <li>• identify examples of creative and innovative textile design</li> <li>• use ICTs to explore the creative approaches used by a variety of textile designers</li> <li>• use creative processes to design textile items</li>   <li>• recognise historical, cultural and contemporary sources of inspiration used by textile designers and evident in a variety of textile items</li> <li>• identify features of design evident in construction across the focus areas</li> <li>• outline the elements of design in a textile designer’s work</li> <li>• describe how the elements of design have been used by a designer to create a desired effect</li>   <li>• explain the factors affecting the design of one item of a designer’s work</li> </ul>

<b>Students learn about:</b> <ul style="list-style-type: none"><li>• methods of applying colour and decoration such as<ul style="list-style-type: none"><li>– dyeing</li><li>– beading</li><li>– printing</li><li>– appliqué</li><li>– quilting</li><li>– embroidery</li><li>– hand painting</li></ul></li></ul>	<b>Students learn to:</b> <ul style="list-style-type: none"><li>• examine methods of colouration and decoration used by textile designers</li><li>• investigate and describe at least one technique of colouration and decoration</li><li>• experiment with colour and decorating methods for a specific end product</li></ul>
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<b>Additional content</b>	
<b>Students learn about:</b> <ul style="list-style-type: none"><li>• the practice of innovative and contemporary textile designers in a chosen focus area</li></ul>	<b>Students learn to:</b> <ul style="list-style-type: none"><li>• compare and contrast the practice of two innovative, contemporary textile designers</li><li>• use multimedia applications to present the results of the investigation</li></ul>

**Area of Study: Properties and Performance of Textiles**

The content in this area of study focuses on developing a basic understanding of the unique properties of a range of textiles and the ways in which they perform. By deconstructing a textile item, that is the dissection of an item into its component parts by looking at the whole item and then breaking it down progressively to its initial state, students will gain a broad understanding of how textile items are constructed.

<p><b>Outcomes</b>                  A student:                  5.1.1 explains the properties and performance of a range of textile items                  5.1.2 justifies the selection of textile materials for specific end uses</p>	
<p><b>Students learn about:</b></p> <p><b>Performance of textile items</b></p> <ul style="list-style-type: none"> <li>• end uses of textile items and performance criteria</li> <li>• design features of textile items</li> <li>• the component parts of a variety of textile items from a range of focus areas</li> <li>• notions required for the textile item</li> <li>• sequence of construction</li> <li>• techniques of manufacture</li> <li>• pattern shapes and markings</li> </ul> <p><b>Fabric</b></p> <ul style="list-style-type: none"> <li>• common fabric names eg denim, organza, jersey, polar fleece, felt</li> <li>• common fabric structures including                         <ul style="list-style-type: none"> <li>– knitted</li> <li>– woven</li> <li>– non-woven</li> </ul> </li> </ul> <p><b>Yarn</b></p> <ul style="list-style-type: none"> <li>• structure and properties of yarns including                         <ul style="list-style-type: none"> <li>– staple spun</li> <li>– filament</li> </ul> </li> </ul> <p><b>Fibre</b></p> <ul style="list-style-type: none"> <li>• types of fibres                         <ul style="list-style-type: none"> <li>– natural</li> <li>– manufactured</li> <li>– fibre blends</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• identify the performance criteria of textile items and link to end use</li> <li>• sketch and label design features of the textile items</li> <li>• deconstruct a textile item to its component parts</li> <li>• examine textile items and identify the notions used</li> <li>• outline the sequence of construction of textile items</li> <li>• identify techniques of manufacture of textile items</li> <li>• draw the pattern shapes used to construct items and label pattern markings</li> <li>• recognise and name fabric(s) used in textile items</li> <li>• identify fabric structure(s) using appropriate technology</li> <li>• identify the yarn structure used in textile items</li> <li>• examine and/or test textile materials to identify the fibre(s) use in textile items</li> </ul>

<b>Students learn about:</b> <b>Properties of fabrics and fibres</b> <ul style="list-style-type: none"><li>• functional properties eg absorbency, durability, resilience, flammability</li><li>• aesthetic aspects eg drape, lustre, handle</li></ul>	<b>Students learn to:</b> <ul style="list-style-type: none"><li>• describe how fabric, yarn and fibre properties contribute to the performance of textile items</li></ul>
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<b>Additional content</b>	
<b>Students learn about:</b> <ul style="list-style-type: none"><li>• recent textile innovations in<ul style="list-style-type: none"><li>– structure of fabrics</li><li>– yarn structure</li><li>– fibre types</li><li>– notions</li></ul></li></ul>	<b>Students learn to:</b> <ul style="list-style-type: none"><li>• select a recent textile innovation and create a range of textile items that make use of the innovation in a creative way</li></ul>

**Area of Study: Textiles and Society**

Successful textile designers bring together aspects of historical, cultural and contemporary perspectives to make their designs a relevant expression of the times. Understanding these perspectives will inform students for their own design practice in textile project work.

<p><b>Outcomes</b>                  A student:                  5.3.1 analyses the influence of historical, cultural and contemporary perspectives on textile design, construction and use                  5.3.2 evaluates the impact of textiles production and use on the individual consumer and society</p>	
<p><b>Students learn about:</b></p> <p><b>Historical perspectives of textiles</b></p> <ul style="list-style-type: none"> <li>• historical periods, technological advances and social events that have impacted on the development of textiles</li> <li>• design features characteristic of textile items throughout history</li> </ul> <p><b>Cultural perspectives of textiles</b></p> <ul style="list-style-type: none"> <li>• the use of textiles as an expressive and functional medium in different cultures</li> <li>• design features characteristic of textile items from different cultural groups</li> </ul> <p><b>Contemporary perspectives of textiles</b></p> <ul style="list-style-type: none"> <li>• the sectors of the textile industry                         <ul style="list-style-type: none"> <li>– textiles</li> <li>– clothing</li> <li>– footwear</li> <li>– allied industries</li> </ul> </li> <li>• career opportunities and pathways in the textile industry</li> <li>• the changing nature of work in the textile industry                         <ul style="list-style-type: none"> <li>– working conditions</li> <li>– outsourcing (local and offshore)</li> <li>– Occupational Health and Safety</li> <li>– Anti-discrimination legislation</li> <li>– EEO principles</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• explore historical, technological and social circumstances that have impacted on the development of textiles</li> <li>• examine the contributions of females and males to the development of textiles throughout history</li> <li>• recognise design features of textile items from different periods in history and identify these design features in contemporary designs</li> <li>• describe how different cultures (including Indigenous Australian) use textiles as an expressive and functional medium</li> <li>• recognise the design features of textile items from different cultural groups</li> <li>• name and list activities undertaken in each of the sectors of the textile industry</li> <li>• explore career opportunities and pathways in the textile industry</li> <li>• recognise the nature of work in the textile industry, past and present</li> </ul>

<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• factors affecting consumer demand, selection and use of textiles such as             <ul style="list-style-type: none"> <li>– social trends in society</li> <li>– marketing strategies</li> <li>– gender</li> <li>– age</li> <li>– cost</li> <li>– design and construction qualities of textile items</li> <li>– ethical and environmental considerations</li> </ul> </li>   <li>• environmental aspects of textile production such as             <ul style="list-style-type: none"> <li>– pollution</li> <li>– recycling</li> <li>– conservation of resources</li> </ul> </li>   <li>• textile innovations in fabric, yarn or fibre manufacture</li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• examine a variety of factors that affect consumer demand, selection and use of textiles</li> <li>• evaluate marketing strategies (including internet) used by at least two different textile-based companies</li> <li>• examine how textiles are used to reinforce stereotypical understandings of what it means to be ‘acceptable’</li> <li>• identify how textile-based companies consider ethical and/or environmental issues in the design and production of textile items</li> <li>• evaluate the potential impact of the production of textile items on the environment</li>   <li>• investigate and report on at least one textile innovation</li> <li>• describe the benefits of this innovation for consumers and/or society</li> </ul>
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<b>Additional content</b>	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• the cyclical nature of textile design trends related to a chosen focus area</li> <li>• trends in             <ul style="list-style-type: none"> <li>– colour and decoration</li> <li>– silhouette/shapes</li> <li>– fibre, yarn, fabric</li> <li>– manufacturing techniques</li> <li>– design features</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• identify the design trends of textile items that are cyclical in nature</li> <li>• investigate the design trends of textile items in a chosen focus area</li> <li>• predict future trends in textile design and develop a visual presentation</li> </ul>

**Life Skills**

For some students with special education needs, particularly those students with an intellectual disability, it may be determined that the above content is not appropriate. For these students, Life Skills outcomes and content can provide the basis for the development of a relevant and meaningful program – see section 8.

## 8 Life Skills Outcomes and Content

The Board of Studies recognises that a small percentage of students with special education needs may best fulfill the mandatory curriculum requirements for Textiles Technology by undertaking Life Skills outcomes and content. (Requirements for access to Life Skills outcomes and content are detailed in section 1.2.)

Life Skills outcomes will be selected on the basis that they meet the particular needs, goals and priorities of each student. Students are not required to complete all outcomes. Outcomes may be demonstrated independently or with support.

In order to provide a relevant and meaningful program of study that reflects the needs, interests and abilities of each student, schools may integrate Textiles Technology Life Skills outcomes and content across a variety of school and community contexts.

### 8.1 Outcomes

<b>Objectives</b>	<b>Outcomes</b>
Students will develop:	A student:
1 knowledge and understanding of the properties and performance of textiles	LS1.1 selects fabrics, yarns and fibres appropriate to intended use
2 knowledge and understanding of and skills in design for a range of textile applications	LS2.1 evaluates the design of clothing and household items in terms of function and aesthetics
3 knowledge, understanding and appreciation of the significant role of textiles for the individual consumer and for society	LS3.1 explores factors that influence textile design
4 skills in the creative documentation, communication and presentation of design ideas	LS4.1 gathers and uses information for design purposes LS4.2 uses a variety of techniques to present design ideas and solutions
5 skills in the selection and proficient and creative use of textile materials, equipment and techniques to produce quality textile items	LS5.1 demonstrates skills and techniques in the context of a textiles project LS5.2 demonstrates safe practices in the use of equipment and the implementation of techniques LS5.3 undertakes textiles projects
6 knowledge and skills to evaluate quality in the design and construction of textile items	LS6.1 applies appropriate evaluation techniques to a textiles project

## 8.2 Content

The content forms the basis for learning opportunities. Content will be selected on the basis that it meets the needs, goals and priorities of each student. Students are not required to complete all of the content to demonstrate achievement of an outcome.

The examples provided are suggestions only.

<b>Outcome LS1.1:</b> A student selects fabrics, yarns and fibres appropriate to intended use.	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• fibres, yarns and fabrics</li> <li>• characteristics of fabrics that affect their intended purpose and use including             <ul style="list-style-type: none"> <li>– flammability</li> <li>– absorbency</li> <li>– durability</li> <li>– strength</li> <li>– ease of care</li> <li>– knitted or woven</li> </ul> </li> <li>• fabrics commonly used in clothing and household items</li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• recognise differences between fibres, yarns and fabrics in the context of textile items</li> <li>• select fabrics for particular purpose and use eg waterproof fabric for beach bag, heat-resistant fabric for an oven mitt, strong fabric for a work apron, absorbent fabric for a baby’s bib, crease-resistant fabric for boxer shorts, knitted fabric for a T-shirt</li> <li>• recognise common types of fibre and fabrics used in clothing and household items eg polyester, denim, cotton, vinyl</li> </ul>

<b>Outcome LS2.1:</b> A student evaluates the design of clothing and household items in terms of function and aesthetics.	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• function and aesthetics in the context of selecting clothing and household items</li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• choose clothes and household items appropriate to function, age, weather, occasion, safety, aesthetics</li> <li>• choose clothes that enhance appearance taking into consideration             <ul style="list-style-type: none"> <li>– body shape</li> <li>– colour combinations</li> <li>– elements of design including line, direction, shape, size, colour and texture</li> </ul> </li> </ul>

<b>Outcome LS3.1:</b> A student explores factors that influence textile design.	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• the impact of technology, culture and history on fashion and design trends</li>   <li>• the impact of marketing on clothing and accessories selection             <ul style="list-style-type: none"> <li>– mass media</li> <li>– advertising</li> <li>– shopping environments</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• recognise the impact of             <ul style="list-style-type: none"> <li>– technology eg mass production, high speed sewing, globalisation</li> <li>– culture eg indigenous cultures, popular</li> <li>– history eg tradition, fashion cycles</li> </ul> </li> <li>• recognise the influence of marketing on their purchases             <ul style="list-style-type: none"> <li>– compare value for money in relation to ‘brand name’ as opposed to ‘generic brands’ of clothing and accessories</li> <li>– consider the longevity of fashion ‘fads’</li> <li>– consider the impact of ‘pressure to buy’ when shopping</li> </ul> </li> </ul>

<b>Outcome LS4.1:</b> A student gathers and documents information for design purposes.	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• obtaining and using information from a variety of sources for design purposes</li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• gather information from a variety of sources such as             <ul style="list-style-type: none"> <li>– electronic media</li> <li>– people</li> <li>– newspaper</li> <li>– library</li> <li>– internet</li> <li>– CD-ROMs etc</li> </ul> </li> <li>• use information for design purposes eg compile a sample board for the redecoration of a bedroom – include colours, fabrics, textures and accessories</li> </ul>

<p><b>Outcome LS4.2:</b> A student uses a variety of techniques to present design ideas and solutions.</p>	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>using a variety of communication techniques</li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>use techniques to communicate ideas including                             <ul style="list-style-type: none"> <li>draw pictures</li> <li>take photographs and use digital camera</li> <li>use video camera</li> <li>use computer graphics</li> <li>participate in discussions</li> </ul>                             eg show the development of design for decorating a hat: inspirational pictures, design sketches, swatches/embellishments                         </li> </ul>
<p><b>Outcome LS5.1:</b> A student demonstrates skills and techniques in the context of a textiles project.</p>	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>skills and techniques that are necessary to undertake a specific textiles project</li> <li>how skills and processes may be combined to complete a project</li> <li>fabrics commonly used in clothing and household items</li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>demonstrate skills and techniques in the context of a textiles project eg                             <ul style="list-style-type: none"> <li>use scissors safely to cut a range of materials</li> <li>thread a needle of appropriate size for a hand-sewing task</li> <li>attach a range of fasteners such as hook and eye, buttons</li> <li>use appropriate fabric glue</li> <li>thread a sewing machine</li> </ul> </li> <li>demonstrate a combination of skills and processes in the context of a textile project eg                             <ul style="list-style-type: none"> <li>estimate amount of fabric required</li> <li>measure fabric in accordance with a pattern</li> <li>cut out fabric in accordance with a pattern</li> <li>use a sewing machine to assemble a garment or item</li> <li>complete hand-sewing if required</li> </ul> </li> <li>recognise common types of fabrics and fibre used in clothing eg polyester, denim, cotton, vinyl</li> </ul>

<p><b>Outcome LS5.2:</b> A student demonstrates safe practices in the use of equipment and the implementation of techniques.</p>	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• handling and using a variety of equipment safely</li>   <li>• caring for textile items</li>                   <li>• using safe techniques in the context of a textiles design project</li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• identify characteristics of textiles equipment that could make them dangerous eg             <ul style="list-style-type: none"> <li>– sharpness</li> <li>– temperature</li> <li>– electrical connections</li> <li>– weight</li> </ul> </li> <li>• carry and transfer textiles equipment safely eg             <ul style="list-style-type: none"> <li>– passing scissors</li> <li>– handling pins and needles</li> <li>– carrying heavy sewing machines</li> </ul> </li> <li>• select suitable laundering techniques for a range of textile items eg             <ul style="list-style-type: none"> <li>– hand washing</li> <li>– machine washing</li> <li>– drying</li> <li>– dry cleaning</li> </ul> </li> <li>• use equipment to clean and care for a variety of fabrics safely eg             <ul style="list-style-type: none"> <li>– use washing machines, clothes dryers and irons in accordance with the fabric label directions</li> </ul> </li> <li>• care for and maintain textiles equipment eg             <ul style="list-style-type: none"> <li>– report faulty electrical equipment such as leaking iron</li> <li>– store equipment appropriately such as returning pins and needles to containers</li> <li>– keep work areas such as a sewing machine table tidy</li> </ul> </li> <li>• apply safe cutting out procedures eg             <ul style="list-style-type: none"> <li>– cut out on a flat surface</li> <li>– ensure fabric scissors are used</li> <li>– check pattern layout before cutting</li> </ul> </li> <li>• use safe sewing machine techniques eg             <ul style="list-style-type: none"> <li>– thread machine prior to electrical connection</li> <li>– refrain from sewing over pins</li> <li>– raise needle prior to removing fabric from machine</li> </ul> </li> <li>• demonstrate safe ironing techniques eg             <ul style="list-style-type: none"> <li>– adjust ironing board to correct height</li> <li>– iron at correct temperature for fabric</li> <li>– turn off iron when not in use</li> </ul> </li> </ul>

<p><b>Outcome LS5.3:</b> A student undertakes textiles projects.</p>	
<p><b>Students learn about:</b></p> <ul style="list-style-type: none"> <li>• undertaking (independently or with support) a textiles design project that may include             <ul style="list-style-type: none"> <li>– inspiration</li> <li>– idea creation</li> <li>– synthesis of ideas and information</li> <li>– making</li> <li>– evaluating</li> <li>– communicating</li> <li>– managing</li> </ul> </li> </ul>	<p><b>Students learn to:</b></p> <ul style="list-style-type: none"> <li>• undertake (independently or with support) a specific textile project             <ul style="list-style-type: none"> <li>eg personalise a T-shirt                 <ul style="list-style-type: none"> <li>– communicate a desire for a new garment with a variety of colours</li> <li>– express preferences for colours</li> <li>– indicate preferred method of decorating with colours such as tie-dying, stencilling or screen printing, appliqué, embroidery</li> <li>– indicate materials required</li> <li>– participate in the process of decorating a T-shirt</li> <li>– express satisfaction with result</li> </ul> </li> <li>eg undertake a basic garment repair                 <ul style="list-style-type: none"> <li>– identify need for repairs and explore available options</li> <li>– determine the most appropriate solution</li> <li>– select appropriate equipment and materials</li> <li>– carry out the repair</li> <li>– evaluate the effectiveness of the repair</li> </ul> </li> <li>eg decorate a hat                 <ul style="list-style-type: none"> <li>– indicate preferred type of hat by identifying purpose</li> <li>– suggest design for decoration</li> <li>– identify and gather materials required such as flowers, ribbon, fasteners</li> <li>– undertake decoration</li> <li>– evaluate finished product in terms of satisfaction</li> </ul> </li> <li>eg make a beach bag                 <ul style="list-style-type: none"> <li>– determine size and form of bag</li> <li>– select a design pattern from a range of options</li> <li>– identify and gather materials and equipment needed such as fabric, thread, sewing machine</li> <li>– construct bag using the pattern</li> <li>– evaluate effectiveness in terms of intended purpose and suggest modifications if appropriate</li> </ul> </li> </ul> </li> </ul>

<b>Outcome LS6.1:</b> A student applies appropriate evaluation techniques to a textiles project.	
<b>Students learn about:</b> <ul style="list-style-type: none"><li>evaluating a project in response to aesthetic appeal, functionality, durability and cost-effectiveness</li><li>expressing value judgements about aspects of a finished product</li></ul>	<b>Students learn to:</b> <ul style="list-style-type: none"><li>respond to questions eg<ul style="list-style-type: none"><li>do you like it?</li><li>would you change anything?</li><li>is it strong enough?</li><li>will it last?</li></ul></li><li>identify specific skills used and comment on personal proficiency in each area</li><li>make suggestions for enhancing skills in the context of future projects</li><li>re-evaluate project in the light of any modifications made</li></ul>

## 9 Continuum of Learning in Textiles Technology K–10

### 9.1 Stage Statements

Stage statements illustrate the continuum of learning in the *Textiles Technology Years 7–10 Syllabus* and are summaries of the knowledge, understanding, skills, values and attitudes that have been developed by students as a consequence of achieving the outcomes for the relevant stage of learning.

#### Early Stage 1 – Science and Technology

Students who have achieved Early Stage 1 show a growing awareness of, and interest in, the natural and made environments. They demonstrate confidence in proposing ideas for designs they develop through play and modelling. They demonstrate curiosity about artefacts, events, phenomena, places and living things around them.

Early Stage 1 students use play to explore ideas, manipulate materials and trial solutions. They develop and begin to refine their understanding of environments, materials, equipment and other resources through trial and error. They ask questions, suggest ideas, propose their own explanations and are able to report verbally and graphically on their actions and observations.

Students in this stage use their senses to observe features of their immediate environment and to explore the properties of a range of common materials. They identify and group living and non-living things according to some common characteristics.

Students explore and identify the needs of people and other living things. They recognise the use of some forms of energy and their ideas about it are beginning to develop as they experience energy in different contexts.

Students generate their own ideas, using make-believe, and express these verbally, pictorially and through modelling. They are unlikely to perceive the steps in a designing and making process as they often work in situations where these aspects occur at the same time. They identify what they like or dislike about their designs or explorations.

Students in Early Stage 1 recognise that information can come from a variety of sources, including other people and from different media, for example, books and videos. They demonstrate an awareness of a range of uses for computer-based technology as well as showing an emerging confidence in their ability to explore and use computer-based technologies, with assistance, to create text, images and play games.

Students show growing awareness of the appropriate use and maintenance of a range of classroom equipment. They give reasons for safe working practices and organisational procedures related to the use of equipment, resources and materials. Students develop ideas through the use and manipulation of concrete materials as a means of progressing towards abstract thought.

## **Stage 1 – Science and Technology**

Students who have achieved Stage 1 are developing an awareness of the wider world and are applying their scientific and technological understanding to new and different situations. They are starting to develop the social skills required to investigate, design and make products and services.

Students are starting to appreciate the interdependence of living things and their environments. They recognise that people create products, services and environments to meet their own needs. They build on their existing understanding of some of the forms of energy.

Students are able to interpret information and make predictions based on their own observations. They are better able to accept that the result of a test may be different from what was originally expected.

Students are able to recognise the purpose of an investigation and seek further information as a result of their own curiosity. They begin to see that an investigation is a series of orderly steps. They use their senses to identify similarities and differences. Students show curiosity about natural and made environments and seek explanations that allow them to interpret their observations.

Using plans, drawings and models, Stage 1 students begin to generate and select ideas to best meet design task objectives, and give simple explanations of why they have chosen a certain idea. Students in this stage can draw plans for a design and can explain some of the features and materials to be used. They can write labels and simple explanations when creating images.

Students recognise and discuss with others some of the strengths and limitations of what they have done and identify some changes that could be made to improve plans or models, for example in appearance. They make comparisons about what they like and dislike about familiar products, systems or environments.

Students effectively manipulate materials that are available in the classroom environment, and show a growing awareness of the different properties of such materials and how they affect the way in which the materials are used. They recognise that some materials occur naturally, while others are made.

Students have a developing awareness of a range of media and information products. They are able to use computer technology to start and open files or applications, save and shut down. They are able to use computer-based technologies where appropriate for a given task.

They are able to identify the different forms of technology in their immediate environments and explain how they help us. They safely use, maintain and store equipment such as scissors, magnifying glasses, computers and disks.

## **Stage 2 – Science and Technology**

Students who have achieved Stage 2 are able to initiate their own investigations as a result of something that has aroused their curiosity. They ask perceptive questions and respond to design tasks in innovative ways. They identify ways of improving their own scientific and technological activities by considering issues such as how well something works, its appearance and how it might affect the environment.

Students develop the capacity to ask questions to clarify understanding. They predict outcomes by proposing explanations and testing to see if their predicted outcomes eventuate. As students develop skills in predicting, testing, recording results and drawing conclusions, they begin to form understanding about ‘fair testing’ that takes into account the need for consistent conditions combined with one variable, in order to ensure accurate results.

Students who have achieved Stage 2 are able to explore ideas for investigations and their design proposals in order to identify where decisions still need to be made, and to suggest possible courses of action. Students may suggest modifications to improve their initial proposals, including the selection of different solutions to arrive at a suitable outcome.

Students are able to explore the properties, capabilities and working characteristics of both natural and manufactured materials and components. They recognise that materials are varied and have different properties that affect their use. They can select, maintain and safely use classroom tools and equipment, hardware and software, and justify their selection for particular tasks.

Students give consideration to issues such as function and aesthetics when designing and evaluating products, services and environments. They can identify some limitations when carrying out a design task. Students develop plans that show some consideration of the types and quantities of materials required and an awareness of the need for accuracy in a plan for production purposes.

Students recognise the function of some hardware and software and are able to select and use these to meet the requirements of a task. They can discuss the possibilities and limitations of using a range of technology including computer-based technology.

Students are developing a capacity to understand relationships in the natural world. They can identify and describe some aspects of the structure and function of living things and some of the ways living things interact. They can also identify and describe some of the interactions of the Earth with other parts of the solar system. Students in this stage devise systems that inform or utilise their understanding of some forms of energy.

Students also demonstrate a greater understanding of and control over a design process. They recognise the importance of evaluation throughout a design cycle.

### **Stage 3 – Science and Technology**

Students who have achieved Stage 3 are able to undertake investigations independently in order to satisfy their own curiosity. They demonstrate a willingness to initiate their own investigations; this might include designing appropriate fair tests to evaluate a range of possible explanations for the results of their investigations.

Students select and use appropriate language, structures and media and demonstrate skills in critically examining and communicating scientific and technological ideas and issues. Students can relate their scientific and technological understanding to new tasks or different situations.

Students research and investigate to identify phenomena and processes that have influenced Earth over time. They build on their existing understanding of forms of energy.

Students are aware of the skills and processes involved in designing and making, investigating and using technology. They manage the design process including aspects of time management, design constraints and needs of the target audience. At this stage, they can make decisions involving some conflicting interests or issues, for example ethical, aesthetic, environmental and cultural.

Students use two- and three-dimensional drawings and models to develop and modify their design ideas and to communicate details to others. They recognise and use some conventions and symbols related to developing plans and diagrams, such as measurements and some use of scale. They can observe the form and detail of objects carefully in order to produce accurate drawings from different views and they reflect on their drawings, sketches or computer models.

Students are aware of a range of issues related to scientific and technological achievements. They are capable of acquiring information from a variety of sources and are able to experiment with new techniques and skills as technologies change. Students identify emerging trends by using data, diagrams and a range of tools and equipment to assist with observations.

Students recognise that computer-based technologies have a wide range of applications in society and can identify and describe some of the effects of such technologies on individuals and communities. Students who have achieved Stage 3 can confidently and competently use a range of computer-based hardware and applications. Students at this stage can identify alternative uses and can be creative in adapting available software to the requirements of a task.

Students reflect on the methods used and positive and negative results of technological and scientific activity both throughout their own projects and in personal, local and global contexts.

#### **Stage 4 – Technology (Mandatory)**

Students at Stage 4 are able to independently initiate design projects and investigations that reflect an understanding of needs and opportunities. They demonstrate the ability to research and extract information from a variety of sources and a willingness to use experiments and tests to enhance the development of a design project. They describe factors that influence design.

Students select and use a broad range of media and method and appropriate language and structures to accurately communicate design ideas to a diverse audience. This may include recounting the process of designing, producing and evaluating used when developing design projects. Students are aware of the skills and processes involved in designing and are able to generate and communicate design ideas and solutions. They develop knowledge and understanding of a range of design processes, roles of designers and associated work opportunities. They can identify what makes good design and are able to creatively develop quality design projects.

Students responsibly, safely, confidently and accurately apply a range of contemporary and appropriate tools, materials and techniques and understand the implications and applications of these in the wider community. Students demonstrate competence when using a range of ICTs and have the ability to select and use them appropriately in developing design projects.

Students recognise the importance of safety, quality and management in the design and production of design projects. They learn to manage their own time by sequencing processes of designing, producing and evaluating to plan ahead. They work collaboratively and learn to work safely with others in technological environments.

Throughout the design process students reflect on and evaluate their design projects. They consider the impact of innovation and emerging technology on society and the environment and identify and explain ethical, social, sustainability and environmental considerations related to design projects.

#### **Stage 4 – Textiles Technology**

Students at Stage 4 have developed higher order understanding and skills in the context of more specialised technology applications through a study of Textiles Technology. In particular students focus more directly on the development of textile projects in selected focus areas in consideration of the properties and performance of textiles, design considerations specific to textiles and the role of textiles in society.

## **Stage 5 – Textiles Technology**

Students at Stage 5 are able to undertake project work, identifying functional requirements and aesthetic features of their designs, demonstrating decision-making processes and expressing individual ideas. Students demonstrate practical skills in design and in the manipulation of textiles including the ability to select and use appropriate techniques, equipment and technologies. These investigations enable them to design, produce and evaluate quality textile projects with confidence.

Students apply knowledge and understanding of the properties and performance of textiles through the study of fabrics, colouration, yarns and fibres. Investigations, experimentation and project work will enable students to be discriminative in their choices of textiles for particular uses. Students are discerning in their design and construction of textiles items and are informed textile consumers relating performance criteria to intended use of a textile item.

Students select and use appropriate language and a broad range of media to accurately communicate technological ideas to a variety of audiences for a number of purposes. In the production of supporting documentation students demonstrate skills in communicating ideas in written and graphic forms using freehand and/or various computer applications.

Students are aware of the development of technology and its impact on the textile industry and society. Students demonstrate knowledge, skills and understanding of a range of techniques, tools, materials and technology appropriate to the production and use of textiles. Students can confidently and competently use a range of technologies including those which are computer-based.

Students apply theoretical underpinnings in a practical manner. Through the management of open-ended, negotiated projects in safe learning environments, students manage risks, express ideas and opinions, experiment and test ideas, and demonstrate responsibility in decision-making. Students reflect on and evaluate decisions made in the production of textile items, and consider the impact on the individual consumer and society.

## 10 Assessment

### 10.1 Standards

The Board of Studies *K–10 Curriculum Framework* is a standards-referenced framework that describes, through syllabuses and other documents, the expected learning outcomes for students.

Standards in the framework consist of two interrelated elements:

- outcomes and content in syllabuses showing what is to be learnt
- descriptions of levels of achievement of that learning.

Exemplar tasks and student work samples help to elaborate standards.

Syllabus outcomes in Textiles Technology contribute to a developmental sequence in which students are challenged to acquire new knowledge, understanding and skills.

The standards are typically written for two years of schooling and set high, but realistic, expectations of the quality of learning to be achieved by the end of Years 2, 4, 6, 8, 10 and 12.

#### Using standards to improve learning

Teachers will be able to use standards in Textiles Technology as a reference point for planning teaching and learning programs, and for assessing and reporting student progress. Standards in Textiles Technology will help teachers and students to set targets, monitor achievement, and, as a result, make changes to programs and strategies to support and improve each student's progress.

### 10.2 Assessment for Learning

*Assessment for learning* in Textiles Technology is designed to enhance teaching and improve learning. It is assessment that gives students opportunities to produce the work that leads to development of their knowledge, understanding and skills. *Assessment for learning* involves teachers in deciding how and when to assess student achievement, as they plan the work students will do, using a range of appropriate assessment strategies including self-assessment and peer assessment.

Teachers of Textiles Technology will provide students with opportunities in the context of everyday classroom activities, as well as planned assessment events, to demonstrate their learning.

In summary, *assessment for learning*:

- is an essential and integrated part of teaching and learning
- reflects a belief that all students can improve
- involves setting learning goals with students
- helps students know and recognise the standards they are aiming for
- involves students in self-assessment and peer assessment
- provides feedback that helps students understand the next steps in learning and plan how to achieve them
- involves teachers, students and parents in reflecting on assessment data.

## Quality Assessment Practices

The following *Assessment for Learning Principles* provide the criteria for judging the quality of assessment materials and practices.

### Assessment for learning:

- **emphasises the interactions between learning and manageable assessment strategies that promote learning**

In practice, this means:

- teachers reflect on the purposes of assessment and on their assessment strategies
- assessment activities allow for demonstration of learning outcomes
- assessment is embedded in learning activities and informs the planning of future learning activities
- teachers use assessment to identify what a student can already do.

- **clearly expresses for the student and teacher the goals of the learning activity**

In practice, this means:

- students understand the learning goals and the criteria that will be applied to judge the quality of their achievement
- students receive feedback that helps them make further progress.

- **reflects a view of learning in which assessment helps students learn better, rather than just achieve a better mark**

In practice, this means:

- teachers use tasks that assess, and therefore encourage, deeper learning
- feedback is given in a way that motivates the learner and helps students to understand that mistakes are a part of learning and can lead to improvement
- assessment is an integral component of the teaching-learning process rather than being a separate activity.

- **provides ways for students to use feedback from assessment**

In practice, this means:

- feedback is directed to the achievement of standards and away from comparisons with peers
- feedback is clear and constructive about strengths and weaknesses
- feedback is individualised and linked to opportunities for improvement.

- **helps students take responsibility for their own learning**

In practice, this means:

- assessment includes strategies for self-assessment and peer assessment emphasising the next steps needed for further learning.

- **is inclusive of all learners**

In practice, this means:

- assessment against standards provides opportunities for all learners to achieve their best
- assessment activities are free of bias.

### 10.3 Reporting

Reporting is the process of providing feedback to students, parents and other teachers about students' progress.

Teachers can use evidence gathered from assessment to extend the process of *assessment for learning* into their *assessment of learning*. In a standards-referenced framework this involves teachers in making professional judgements about student achievement at key points in the learning cycle. These may be at the end of a year or stage, when schools may wish to report differentially on the levels of knowledge, understanding and skills demonstrated by students.

Descriptions of levels of achievement for Stage 4 and Stage 5 in Textiles Technology have been developed to provide schools with a useful tool to report consistent information about student achievement to students and parents, and to the next teacher to help to plan the next steps in the learning process. These describe observable and measurable features of student achievement at the end of a stage, within the indicative hours of study. Descriptions of levels of achievement provide a common language for reporting.

At Stage 5 there are six levels of achievement. Level 6 describes a very high level of achievement in relation to course objectives and outcomes. Level 2 describes satisfactory achievement, while the level 1 description will help identify students who are progressing towards the outcomes for the stage.

At the end of Year 10, teachers of Textiles Technology Years 7–10 will make an on-balance judgement, based on the available assessment evidence, to match each student's achievement to a level description. This level will be reported on the student's School Certificate Record of Achievement.

At Stage 4 there are four levels of achievement. Level 4 describes a very high level of achievement; levels 2 and 3 describe satisfactory and high achievement that should provide a solid foundation for the next stage of learning. The level 1 description will help identify students who are progressing towards the outcomes for the stage.

For students undertaking Life Skills outcomes and content in Years 7–10, the content listed for each identified Life Skills outcome forms the basis of the learning opportunities for these students. It also provides examples of activities on which teachers can base judgements to report student progress in relation to individual learning goals.

## **10.4 Choosing Assessment Strategies**

Planning for assessment is integral to programming for teaching and learning. In a standards-referenced framework, teachers assess student performance on tasks in relation to syllabus outcomes and make on-balance judgements about student achievement. Assessment relies on the professional judgement of the teacher and is based on reliable data acquired in a fair and challenging environment, from multiple performances in a variety of contexts. Assessment is fundamental for furthering student learning.

In planning programs, teachers, individually and collaboratively, review the syllabus and standards materials. They use these materials to describe for themselves what students should know and be able to do at a particular stage, and they consider the kinds of evidence their students could produce to show they have learnt what they needed to learn.

Students are provided with a description of the learning expected to be accomplished, opportunities to discuss the criteria on which judgements will be based, time to learn, and where possible, examples of what that learning looks like.

Assessment is used to determine the students' initial knowledge, understanding and skills, to monitor student progress and to collect information to report student achievement. The assessment cycle is continuous; students receive and give themselves feedback on what they have learnt, and what needs to be done to continue their learning. Students gain information about their learning through feedback from teachers and from self-assessment and peer assessment. The challenge and complexity of assessment tasks increase to enable students to develop evaluative independence as they assess their own knowledge, understanding and skills, and determine ways to improve their learning.

Teachers of Textiles Technology should employ a range of assessment strategies to ensure that information is being gathered regarding the knowledge and understanding that are being acquired, and the skills that are being developed. Strategies should be appropriate to the outcomes being addressed, be manageable in number and be supportive of the learning process. Teachers could work collaboratively in planning appropriate assessment strategies. Working collaboratively leads teachers to develop a shared understanding of the syllabus standards and also supports teachers in making consistent and comparable judgements of student achievement in relation to these standards.

In planning for assessment in Textiles Technology it is important for teachers to consider:

- the requirements of the syllabus
- the accessibility of the proposed activity in terms of language requirements
- the appropriateness of the challenge presented to individual students
- resource availability
- how the task will be administered
- the way in which feedback will be provided.

In planning for assessment, teachers of Textiles Technology need to consider how results will be recorded, with a view to ensuring that there is sufficient and appropriate information collected for making an on-balance holistic judgement of the standard achieved by the student at the end of the stage. The evidence collected should enable teachers of Textiles Technology to make consistent judgements to meet the various reporting requirements that the system, school and community may have.

Textiles Technology particularly lends itself to the following assessment techniques, keeping in mind that a range of strategies should be used to assess the outcomes of the course.

### **Practical experiences**

Textiles Technology students undertake project work throughout the course. They move from undertaking teacher-guided work to a more independent mode. Assessment of these projects should reflect the change in nature and demands at different stages. When students are working on practical work in class, the teacher has the opportunity to observe and note aspects of student learning. When undertaking practical experiences, students could be assessed on their ability to:

- conduct hands-on investigations
- report on and apply the results of investigations
- select appropriate techniques, equipment or material(s) for a project
- justify their use of a particular techniques or material
- use appropriate tools and methods
- set goals, prioritise tasks and manage time effectively
- use equipment safely and efficiently for an appropriate purpose.

### **Research projects**

Research projects can be used to develop in students analytical, organisational and problem-solving skills and may include case studies and internet research projects.

When students undertake research projects, they could be assessed on their ability to:

- conduct appropriate research using a variety of methods
- select and interpret relevant information
- address the chosen issues with clarity
- present information in a logical manner.

### **Written reports**

These may include surveys, evaluation reports, field trip reports, interviews and essays. When students produce a written report, they could be assessed on their ability to:

- show appropriate depth of analysis
- summarise key findings in a concise manner
- use appropriate detail
- use appropriate language consistent with the textiles industry.

### **Presentations**

Presentations allow students to develop skills in communicating their ideas in oral, graphic and written forms using a variety of subject specific concepts and content. They provide opportunities for students to develop and demonstrate their skills and reflect upon the performances of others. Assessment strategies may include prepared and impromptu oral presentations, multimedia presentations and various forms of display techniques. When presentations are used for assessment purposes, students could be assessed on their ability to:

- select and apply appropriate information
- present information in a creative and logical manner.

### **Journals**

Journals provide opportunities for students to write personal reflections. They allow students to develop knowledge, skills and abilities to make informed, responsible choices. They also develop self-awareness and critical thinking skills in students. When using journals as an assessment technique, students could be assessed on their ability to:

- effectively describe the development and production of projects
- show appropriate depth of analysis.

### **Written and practical tests**

Written and/or practical tests can be used to determine if students have the necessary skills, can use correct techniques and can recall, interpret, comprehend and apply knowledge at a level that is appropriate for them to move on to the next step in the learning process. Tests can provide information prior to commencing a unit of work, or along the way, about students' understanding of concepts and allow the teacher to plan further learning activities. It is important that feedback is provided on test performance in order to enhance student learning.

### **Peer assessment**

Textiles Technology encourages the active involvement of students in the learning process. Opportunities exist for individual and collaborative work. Activities such as peer evaluation of initial design ideas for textile projects allow students to draw on feedback from their peers in order to improve their learning.

### **Self-assessment**

In Textiles Technology students are encouraged to acquire basic skills to become self-directed learners. Opportunities exist for students to reflect on their progress towards the achievement of the syllabus outcomes. This reflection provides the basis for improving their learning. Developing self-assessment skills is an ongoing process, becoming increasingly more sophisticated and self initiated as a student progresses. By self-assessing students can:

- identify their own personal development over time
- identify key indicators and evidence of their own learning.