NSW Education Standards Authority

NSW GOVERNMENT

NSW Syllabus for the Australian Curriculum

Textiles Technology

Years 7–10 Syllabus

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Contents

Introduction

The K–10 curriculum

The NSW Education Standards Authority (NESA) syllabuses are developed with respect to some overarching views about education. These include the NESA *K–10 Curriculum Framework* and *Statement of Equity Principles* and the *Melbourne Declaration on Educational Goals for Young Australians* (December 2008).

NESA syllabuses include agreed Australian Curriculum content and content that clarifies the scope, breadth and depth of learning. The Australian Curriculum achievement standards underpin the syllabus outcomes and the Stage statements for Early Stage 1 to Stage 5.

In accordance with the *K–10 Curriculum Framework* and the *Statement of Equity Principles*, the syllabus takes into account the diverse needs of all students. It identifies essential knowledge, understanding, skills, values and attitudes. It outlines 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.

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

The continued relevance of the *K–10 Curriculum Framework* is consistent with the intent of the *Melbourne Declaration on Educational Goals for Young Australians* (December 2008), which sets the direction for Australian schooling for the next ten years. There are two broad goals:

Goal 1: Australian schooling promotes equity and excellence
Goal 2: All young Australians become successful learners, confident and creative individuals, and active and informed citizens.

The way in which learning in the *Textiles Technology Years 7–10 Syllabus* contributes to the curriculum, and to students' achievement of the broad learning outcomes, is outlined in the syllabus rationale.

Diversity of learners

NSW syllabuses are inclusive of the learning needs of all students. Syllabuses accommodate teaching approaches that support student diversity, including students with disability, gifted and talented students, and students learning English as an additional language or dialect (EAL/D). Students may have more than one learning need.

Students with disability

All students are entitled to participate in and progress through the curriculum. Under the *Disability Standards for Education 2005*, schools are required to provide additional support or adjustments to teaching, learning and assessment activities for some students with disability. Adjustments are measures or actions taken in relation to teaching, learning and assessment that enable a student with disability to access syllabus outcomes and content and demonstrate achievement of outcomes.

Students with disability can access outcomes and content from 7–10 syllabuses in a range of ways. Students may engage with:

- syllabus outcomes and content from their age-appropriate Stage with adjustments to teaching, learning and/or assessment activities; or
- selected syllabus outcomes and content from their age-appropriate Stage, relevant to their learning needs; or
- syllabus outcomes from an earlier Stage, using age-appropriate content; or
- selected Years 7–10 Life Skills outcomes and content from one or more syllabuses for students in Stages 4 and 5.

Decisions regarding curriculum options, including adjustments, should be made in the context of collaborative curriculum planning with the student, parent/carer and other significant individuals to ensure that syllabus outcomes and content reflect the learning needs and priorities of individual students.

Further information can be found in support materials for:

- Technologies
- Special Education
- Life Skills.

Gifted and talented students

Gifted and talented students have specific learning needs that may require adjustments to the pace, level and content of the curriculum. Differentiated educational opportunities assist in meeting the needs of gifted and talented students.

Generally, gifted and talented students demonstrate the following characteristics:

- the capacity to learn at faster rates
- the capacity to find and solve problems
- the capacity to make connections and manipulate abstract ideas.

There are different kinds and levels of giftedness and talent. Gifted and talented students may also have learning disabilities and/or English as an additional language or dialect. These needs should be addressed when planning appropriate teaching, learning and assessment activities.

Curriculum strategies for gifted and talented students may include:

- differentiation: modifying the pace, level and content of teaching, learning and assessment activities
- acceleration: promoting a student to a level of study beyond their age group
- curriculum compacting: assessing a student's current level of learning and addressing aspects of the curriculum that have not yet been mastered.

School decisions about appropriate strategies are generally collaborative and involve teachers, parents/carers and students, with reference to documents and advice available from NESA and the education sectors.

Gifted and talented students may also benefit from individual planning to determine the curriculum options, as well as teaching, learning and assessment strategies, most suited to their needs and abilities.

Students learning English as an additional language or dialect (EAL/D)

Many students in Australian schools are learning English as an additional language or dialect (EAL/D). EAL/D students are those whose first language is a language or dialect other than Standard Australian English and who require additional support to assist them to develop English language proficiency.

EAL/D students come from diverse backgrounds and may include:

- overseas and Australian-born students whose first language is a language other than English, including creoles and related varieties
- Aboriginal and Torres Strait Islander students whose first language is Aboriginal English, including Kriol and related varieties.

EAL/D students enter Australian schools at different ages and stages of schooling and at different stages of English language learning. They have diverse talents and capabilities and a range of prior learning experiences and levels of literacy in their first language and in Standard Australian English. EAL/D students represent a significant and growing percentage of learners in NSW schools. For some, school is the only place they use Standard Australian English.

EAL/D students are simultaneously learning a new language and the knowledge, understanding and skills of a syllabus through that new language. They require additional time and support, along with informed teaching that explicitly addresses their language needs, and assessments that take into account their developing language proficiency.

The *ESL Scales* and the *English as an Additional Language or Dialect: Teacher Resource* provide information about the English language development phases of EAL/D students. These materials and other resources can be used to support the specific needs of EAL/D students and to assist students to access syllabus outcomes and content.

Textiles Technology Key

The following codes and icons are used in the *Textiles Technology Years 7–10 Syllabus*.

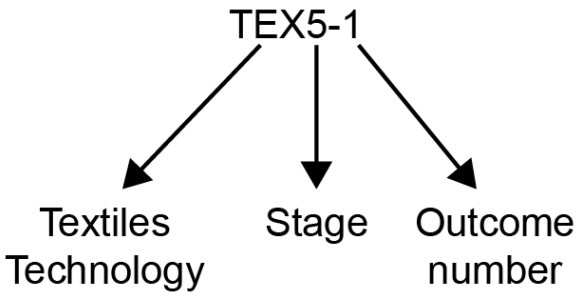
Outcome coding

Syllabus outcomes are coded in a consistent way. The code identifies the subject, Stage, outcome number and the way content is organised.

Stage 4, Stage 5 and Life Skills are represented by the following codes:

Stage	**Code**
Stage 4	4
Stage 5	5
Life Skills	LS

In the Textiles Technology syllabus, outcome codes indicate subject, Stage and outcome number. For example:

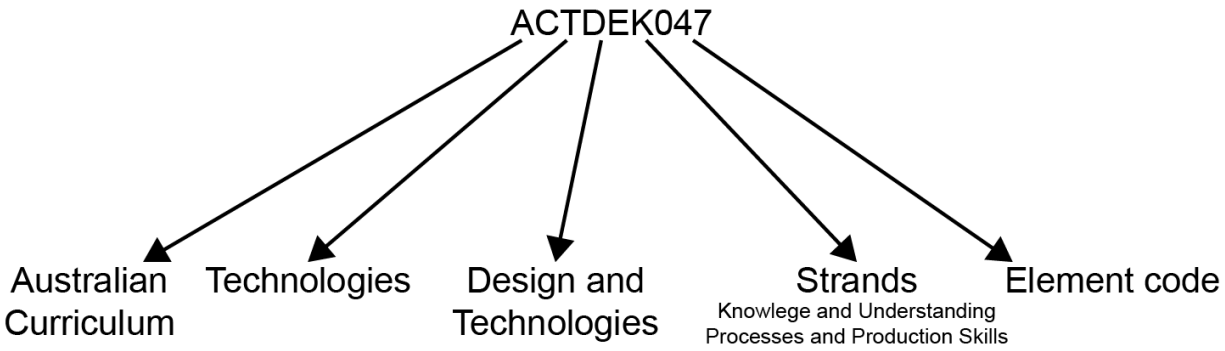


Outcome code	**Interpretation**
TEX5-1	Textiles Technology, Stage 5 – Outcome number 1
TEXLS-7	Textiles Technology, Life Skills – Outcome number 7

Coding of Australian Curriculum content

The syllabus includes Australian Curriculum content for Design and Technologies with Australian Curriculum codes in brackets at the end of each content description, for example:

- Investigate and make judgments, within a range of technologies specialisations, on how technologies can be combined to create designed solutions (ACTDEK047)



Where a number of content descriptions are jointly represented, all description codes are included, eg (ACTDEK046, ACTDEK047).

For example:

- experiment with, select and apply techniques to ensure quality textile items, for example: (ACTDEK046, ACTDEK047)
  - joining fabrics and edge finishes
  - closures
  - colouration and decoration
  - hanging methods for a wall hanging

Learning across the curriculum icons

Learning across the curriculum content, including the cross-curriculum priorities, general capabilities and other areas identified as important learning for all students, is incorporated and identified by icons in the syllabus.

Cross-curriculum priorities

- Aboriginal and Torres Strait Islander histories and cultures
- Asia and Australia's engagement with Asia
- Sustainability

General capabilities

- Critical and creative thinking
- Ethical understanding
- Information and communication technology capability
- Intercultural understanding
- Literacy
- Numeracy
- Personal and social capability

Other learning across the curriculum areas

- Civics and citizenship
- Difference and diversity
- Work and enterprise

Rationale

Textiles Technology enables students 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.

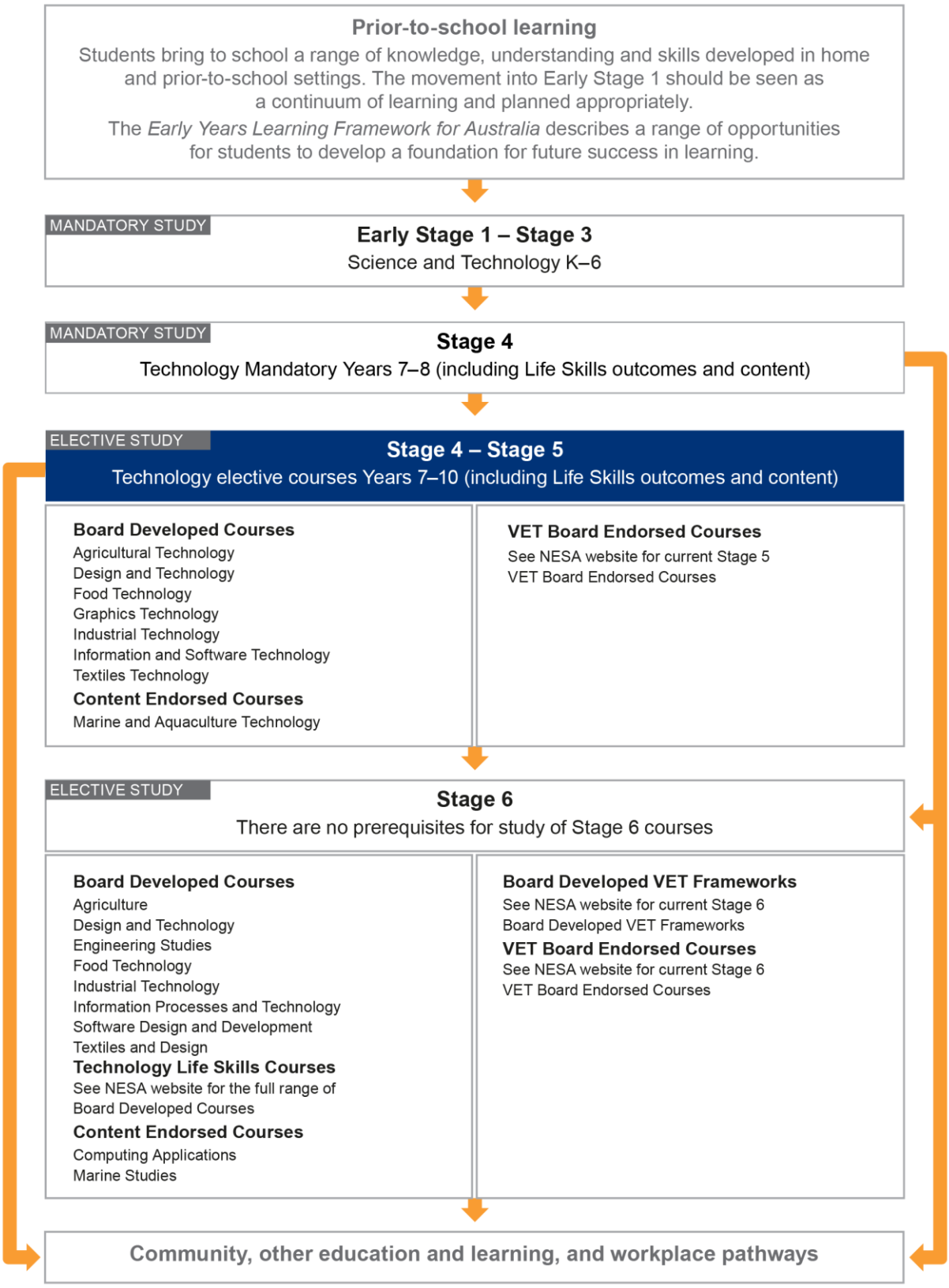
Textiles Technology acknowledges and embraces an understanding of cultural diversity by examining the ways in which different groups have used textiles as an expressive and functional medium, including that of Aboriginal and Torres Strait Islander Peoples. These historical and cultural uses of textiles continue to influence contemporary designers today and students 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, yarns and fibres are explored, and how these are used in conjunction with colouration and decoration techniques. Project Work that includes investigation and experimentation enables students to discriminate in their choices of textiles for particular uses. Students document and communicate their design ideas and experiences applying contemporary technologies 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 investigate the work of textile designers and from this research make judgements about the appropriateness of design ideas, the selection of materials and of tools and the quality of textile items. Students are challenged to transfer knowledge to new situations and projects, building on technical skills and past experiences. Textile projects 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 develop an appreciation of the factors affecting them as textile consumers. Current technologies and innovations that continue to emerge in the textile industry are addressed, with an emphasis on their economic, social and environmental consequences.

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



Aim

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

Objectives

Knowledge, understanding and skills

Students develop:

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

Values and attitudes

Students:

- appreciate the contribution and impact of innovation and technologies now and in the future
- appreciate the dynamic nature of textiles and their use to develop solutions for personal, social and global issues
- appreciate the finite nature of some resources and the impact of their use on the environment and society
- value the development of skills and gain satisfaction from their use to solve problems and create quality products.

Outcomes

Table of objectives and outcomes – continuum of learning

Knowledge, understanding and skills

Objective

Students develop:

- knowledge and understanding of the properties and performance of textiles

Stage 4 outcomes A student:	**Stage 5 outcomes** A student:
TEX4-1 describes the properties and performance of textile items	**TEX5-1** explains the properties and performance of a range of textile items
TEX4-2 suggests appropriate uses for a variety of fabrics, yarns and fibres	**TEX5-2** justifies the selection of textile materials for specific end uses

Objective

Students develop:

- knowledge and understanding of, and skills in design for a range of textile applications

Stage 4 outcomes A student:	**Stage 5 outcomes** A student:
TEX4-3 describes the creative process of design used in the work of textile designers	**TEX5-3** explains the creative process of design used in the work of textile designers
TEX4-4 generates design ideas for textile items	**TEX5-4** generates and develops textile design ideas
TEX4-5 uses methods of colouration and decoration of textile items	**TEX5-5** investigates and applies methods of colouration and decoration for a range of textile items

Objective

Students develop:

- knowledge and understanding of the significant role of textiles for the individual consumer and for society

Stage 4 outcomes A student:	**Stage 5 outcomes** A student:
TEX4-6 describes historical, cultural and contemporary perspectives that influence textile design, construction and use	**TEX5-6** analyses the influence of historical, cultural and contemporary perspectives on textile design, construction and use
TEX4-7 identifies factors affecting consumer demand, selection and use of textiles	**TEX5-7** evaluates the impact of textiles production and use on the individual consumer and society

Objective

Students develop:

- skills in the creative documentation, communication and presentation of design ideas

Stage 4 outcomes A student:	**Stage 5 outcomes** A student:
TEX4-8 uses appropriate technology to document, communicate and present design and project work	**TEX5-8** selects and uses appropriate technology to creatively document, communicate and present design and project work

Objective

Students develop:

- skills in the critical selection and proficient and creative use of textile materials, equipment and techniques to produce quality textile items

Stage 4 outcomes A student:	**Stage 5 outcomes** A student:
TEX4-9 selects and manipulates a range of textile materials	**TEX5-9** critically selects and creatively manipulates a range of textile materials to produce quality textile items
TEX4-10 uses techniques and equipment safely in the production of quality textile projects	**TEX5-10** selects appropriate techniques and uses equipment safely in the production of quality textile projects
TEX4-11 demonstrates skill in the production of textile projects to completion	**TEX5-11** demonstrates competence in the production of textile projects to completion

Objective

Students develop:

- knowledge and skills to evaluate quality in the design and construction of textile items

Stage 4 outcomes A student:	**Stage 5 outcomes** A student:
TEX4-12 identifies aspects of quality in the design and construction of textile items	**TEX5-12** 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.

Stage Statements

Stage statements are summaries of the knowledge, understanding, skills, values and attitudes that have been developed by students as a result of achieving the outcomes for the relevant Stage of learning.

Stage 4 – Technology Mandatory

By the end of Stage 4, students explore problems and opportunities, considering functional, economic, environmental, social, technical and/or usability constraints. They investigate, select, justify and safely use a range of tools, materials, components, equipment and processes to develop, test and communicate design ideas using appropriate technical terms and technologies. Students plan, manage and evaluate the production of design solutions. They develop thinking skills to communicate the development of digital and non-digital solutions.

Students investigate how managed systems are used to sustainably produce food and fibre. They explain food selection and preparation, food safety, and make informed and healthy food choices. Students collect and interpret data from a range of sources to assist in making informed judgements. They explain how data is represented in digital systems, and transmitted and secured in networks.

Students explain how force, motion and energy can be used in systems, machines and structures. They investigate characteristics and properties of a range of materials, develop skills and techniques in the use of a broad range of tools and safely apply them in the production of projects.

Students are responsible users of technology, capable of designing and producing solutions to identified needs or opportunities. They develop an appreciation of the contribution of technologies on their lives now and the impact of innovations for creating preferred futures. They develop an appreciation of the dynamic nature of design and production processes and how thinking skills are used to develop solutions to personal, social and global issues.

Stage 4 – Textiles Technology

By the end of Stage 4, students have developed higher-order understanding and skills in the context of more specialised technology applications through a study of Textiles Technology. In particular, students concentrate 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

By the end of Stage 5, students undertake project work, identify functional requirements and aesthetic features of their designs, demonstrate decision-making processes and express 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 enable students to be discriminative in their choices of textiles for particular uses. Students are discerning in their design and construction of textile 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 graphical forms using freehand and/or computer software.

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 technologies appropriate to the production and use of textiles. Students can confidently and competently use a range of digital presentation and manufacturing technologies.

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 their impact on the individual consumer and society.

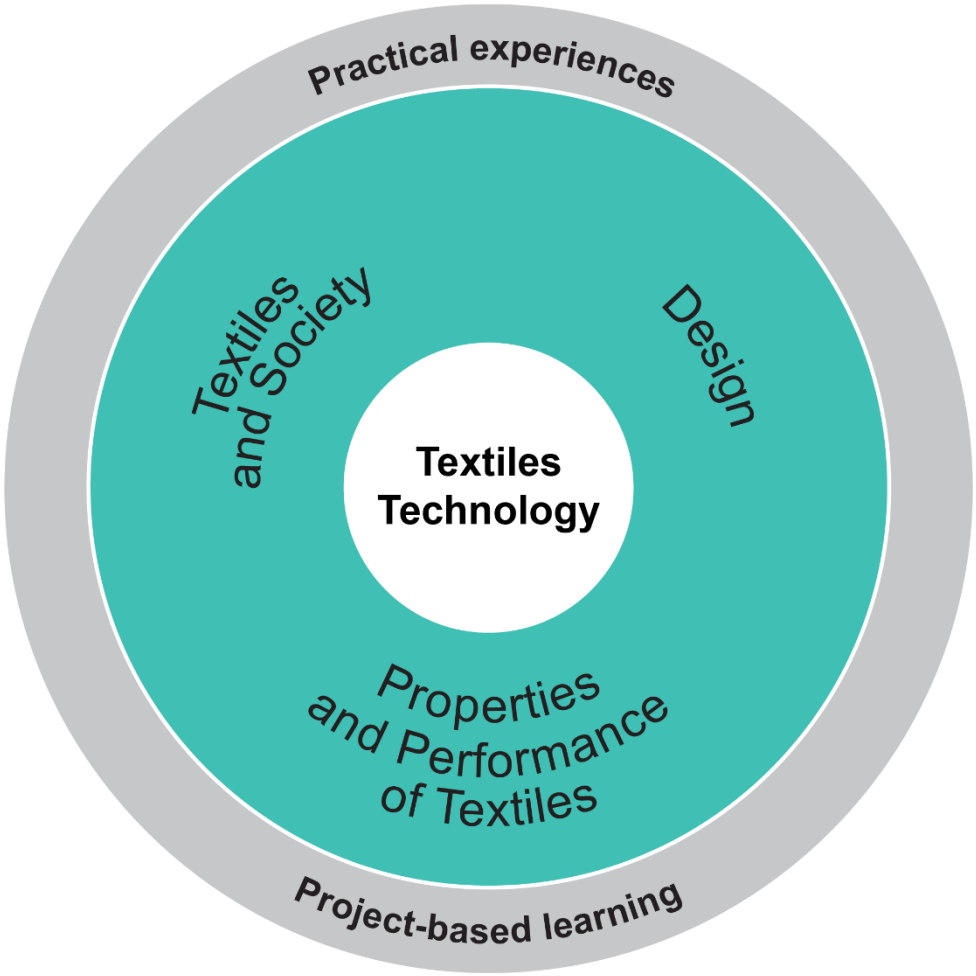
Content

For Kindergarten to Year 10, courses of study and educational programs are based on the outcomes of syllabuses. The content describes in more detail how the outcomes are to be interpreted and used, and the intended learning appropriate for the Stage. In considering the intended learning, teachers will make decisions about the sequence, the emphasis to be given to particular areas of content, and any adjustments required based on the needs, interests and abilities of their students.

The knowledge, understanding and skills described in the outcomes and content provide a sound basis for students to successfully move to the next stage of learning.

Organisation of content

The following diagram provides an illustrative representation of elements of the course and their relationship.



Course structure and requirements

Textiles Technology Years 7–10 is an elective course designed to build upon the Technology Mandatory Years 7–8 course. Outcomes for Stage 4 have been included to allow flexibility for those schools who wish to offer the course in Years 7 and 8.

Areas of study

There are three areas of study:

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

The relevant content from each area of study and the project work will be selected and integrated when creating a unit of work.

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.

Units of work

Project work forms the basis of every unit of work. Teachers 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 must be completed for the 100-hour course, with each unit being developed from a different focus area.
- A minimum of four units of work must be completed for the 200-hour course, covering a minimum of three focus areas.

Units of work additional 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.

Focus areas

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

The focus areas are:

- Apparel – includes clothing and accessories such as shoes, hats, scarves, 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, surfboard covers.

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.

Project work

There are two components of project work:

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

100-hour course delivery
• Students must undertake a range of practical experiences that occupy the majority of the course time. • Project work and areas of study should be integrated in units of work. • A minimum of two units of work must be delivered. • A minimum of two focus areas must be addressed. • All content from project work must be delivered. • All content from the three areas of study must be delivered. • Content from the three areas of study appropriate to the project and focus area must be delivered.

200-hour course delivery
• Students must undertake a range of practical experiences that occupy the majority of the course time. • Project work and areas of study should be integrated in units of work. • A minimum of four units of work must be delivered. • A minimum of three focus areas must be addressed. • All content from project work must be delivered. • All content from the three areas of study must be delivered.

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 allow students to develop skills and confidence in the use of a range of equipment. Student capability, confidence and expertise at their current stage of development are important considerations in determining the teaching and learning sequences in the course.

Students complete a textile item for each unit of work delivered, 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 be a gradual increase in the challenge offered to students in project work to enhance the development of practical skills.

Students with disability may require adjustments and/or additional support in order to engage in practical experiences.

Student negotiated project work

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

Documentation of student work

Students 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 used to create project work, eg fabrics, threads
- producing and evaluating project work.

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

Safety

Schools have a legal obligation in relation to safety. Teachers need to ensure that they comply with relevant legislation as well as system and school requirements in relation to safety and risk management when implementing their programs. This includes legislation and guidelines relating to Work Health and Safety, and the handling and storage of chemicals and dangerous goods. Teachers need to be aware of activities that may require notification, certification, permission, permits and licences.

Schools need to be aware of legal, ethical and cyber security considerations of information and communication technologies, including copyright and intellectual property, cultural considerations, accessibility, privacy issues and digital footprints.

Teachers need to be aware that students may have allergies that can result in anaphylaxis, a severe and sometimes sudden allergic reaction which is potentially life-threatening and always requires an emergency response.

Learning across the curriculum

Learning across the curriculum content, including the cross-curriculum priorities and general capabilities, assists students to achieve the broad learning outcomes defined in the NESA *K–10 Curriculum Framework* and *Statement of Equity Principles*, and in the *Melbourne Declaration on Educational Goals for Young Australians* (December 2008).

Cross-curriculum priorities enable students to develop understanding about and address the contemporary issues they face.

The cross-curriculum priorities are:

- Aboriginal and Torres Strait Islander histories and cultures
- Asia and Australia's engagement with Asia
- Sustainability

General capabilities encompass the knowledge, skills, attitudes and behaviours to assist students to live and work successfully in the 21st century.

The general capabilities are:

- Critical and creative thinking
- Ethical understanding
- Information and communication technology capability
- Intercultural understanding
- Literacy
- Numeracy
- Personal and social capability

NESA syllabuses include other areas identified as important learning for all students:

- Civics and citizenship
- Difference and diversity
- Work and enterprise

Learning across the curriculum content is incorporated, and identified by icons, in the content of the syllabus in the following ways.

Aboriginal and Torres Strait Islander histories and cultures

The syllabus provides students with opportunities to learn about how Aboriginal and Torres Strait Islander Peoples have developed and refined knowledge about the world through observation, making predictions, testing and responding to environmental factors within specific contexts. It emphasises the relationships people have with places and their interconnectedness with the environments in which they live. Students learn about Aboriginal and Torres Strait Islander Peoples' understanding of the environment and the ways that cultural knowledge and Western knowledge can be complementary. Students learn that there are different ways of interacting with the environment and how this can influence sustainability.

When planning and programming content relating to Aboriginal and Torres Strait Islander histories and cultures, teachers are encouraged to:

- read the *Principles and Protocols* relating to teaching and learning about Aboriginal and Torres Strait Islander histories and cultures and the involvement of local Aboriginal communities.
- involve local Aboriginal communities and/or appropriate knowledge holders in determining suitable resources, or to use Aboriginal or Torres Strait Islander authored or endorsed publications.

Asia and Australia's engagement with Asia

Students have opportunities to explore the links that exist between Australia and Asia and appreciate how our interactions help to shape Australia's economy, areas of research, technological advancement and the Australian textile industry. Students identify how the Asia region plays an important role in research, technological developments and textile production.

Sustainability

Sustainability content is focused on renewable resources, the protection of the environment and sustainable patterns of living. It requires consideration of environmental, social, cultural and economic systems and their interdependence.

Students 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.

Critical and creative thinking

Critical thinking is at the core of most activities where students recognise or develop an argument, use evidence in support of an argument, draw reasoned conclusions, and use information to solve problems. Students are provided with opportunities to generate and apply new ideas in specific contexts, view existing situations in a new way, identify alternative explanations, and make links that generate a positive outcome.

The skills and processes of textiles project work provide critical and creative thinking opportunities as students pose questions, make predictions, engage in firsthand investigations, design projects, solve problems and make evidence-based decisions.

Ethical understanding

Students develop capacity to behave ethically as they identify and investigate ethical concepts, values and principles, and understand how reasoning can assist ethical judgement. The syllabus provides opportunities for students to form and make ethical judgements in relation to developing design solutions and the use of online collaborative environments.

They apply ethical guidelines as they design projects, particularly when considering the implications for others and the environment. Students learn about intellectual property, including Indigenous cultural and intellectual property and the protection of cultural knowledge and designs. Students are encouraged to demonstrate ethical digital citizenship, follow social and ethical protocols and understand the need to protect data and intellectual property.

Information and communication technology capability

Students engage with information and communication technology (ICT) when they develop design ideas and solutions, solve problems, collaborate online and communicate information and ideas. ICT capabilities enable students to become effective users of information and communication technologies.

Students engage with a variety of ICT applications, such as computer-aided design (CAD) and presentation software, when developing design ideas and researching information to support project work. ICT will be used in the development, modification, production and presentation of individual student projects.

Intercultural understanding

Students develop intercultural understanding and value their own culture and those of others as they engage with people and textile items from diverse cultural backgrounds in ways that recognise similarities and differences, create connections and cultivate respect. The syllabus provides opportunities for students to appreciate the contribution that diverse cultural perspectives have made to the development of the textiles industry and diversity of textile items available.

Students learn about and engage with issues requiring cultural sensitivity and recognise that people in the textiles industry work in culturally diverse teams. 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. They learn to appreciate the strong connection between culture and textiles and are provided with opportunities to take responsibility for securing positive outcomes for members of all cultural groups.

Literacy

The syllabus provides students with opportunities to develop skills in literacy to effectively communicate and comprehend using a variety of modes and media. Being 'literate' is more than the acquisition of technical skills – it includes the ability to identify, understand, interpret, create and communicate effectively using written, visual and/or digital forms of expression with textile-specific terminology.

The range of communication techniques provides students with the opportunity to understand that information can be presented in a variety of digital forms including diagrams, infographics, flow charts, models, tables and graphs. The metalanguage associated with textiles technology includes specific terms, concepts and processes which provide students with the ability to describe, develop, present and analyse design solutions in a manner which are reflective of real-life experiences.

Project work and the associated documentation provide an authentic context for development of literacy skills, particularly technological literacy.

Numeracy

Real-world numeracy connections are formed when numerical data is collected and manipulated, and numeracy concepts, such as size, proportion and measurement, are used by students for project work.

An appreciation of the fundamental importance of numeracy in everyday life is fostered as students develop an understanding of how numeracy is essential to the development and completion of quality textile items. Students 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. Students also engage in measurement, costing, determining quantities of materials, technical drawings as part of project development and have the opportunity to work with CAD throughout project development.

Personal and social capability

Students develop personal and social capability as they learn to understand and manage themselves, their relationships and their lives more effectively. This provides students with opportunities to establish positive relationships, work effectively both individually and collaboratively, and resolve difficult situations. The syllabus encourages students to explore, question, solve problems and develop skills in communication, display initiative, set goals and make responsible decisions.

Students develop time management skills through project-based learning opportunities.

Civics and citizenship

The syllabus provides students with opportunities to become self-reliant and active members of a society driven by change, emerging technologies and increasingly sophisticated communication and information systems. Students broaden their understanding of civics and citizenship in relation to the application of technological advances and the development of environmental and sustainable practices. Students have opportunities to develop a sense of local responsibility and global citizenship as they improve and advance Australia through their investigations and future-focused solutions.

Difference and diversity

Difference and diversity comprises gender, ethnicity, ability and socioeconomic circumstances. 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. The syllabus provides students with opportunities to develop their awareness, understanding and appreciation of difference and diversity within their lives and the wider community. Students have opportunities to work collaboratively and develop an appreciation of the values and ideas of all group members. Students learn about anti-discrimination legislation and equal employment opportunity principles through the study of textiles technology work environments. This also enables them to identify individual rights, challenge stereotypes and engage with opinions different to their own.

Work and enterprise

Students develop an understanding of careers associated with the textiles industry and learn skills relevant to work and leisure activities. They are provided with opportunities to learn about a broad range of fields related to textiles occupations and study issues related to work and employment.

As part of their studies 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.

Students are provided with opportunities to safely manage and produce projects, and to appreciate quality of work. The application of design and production processes can provide students with work-related skills including individual and collaborative work practices. Students are encouraged to develop initiative, and to become independent thinkers and confident communicators through self-evaluation, projects and practical application of knowledge.

Content for Years 7–10

Project work

Outcomes

A student:

› selects and uses appropriate technology to creatively document, communicate and present design and project work TEX5-8
› critically selects and creatively manipulates a range of textile materials to produce quality textile items TEX5-9
› selects appropriate techniques and uses equipment safely in the production of quality textile projects TEX5-10
› demonstrates competence in the production of textile projects to completion TEX5-11
› evaluates textile items to determine quality in their design and construction TEX5-12

Related Stage 4 outcomes: TEX4-8, TEX4-9, TEX4-10, TEX4-11, TEX4-12

Related Life Skills outcomes: TEXLS-4, TEXLS-5, TEXLS-6, TEXLS-7, TEXLS-8, TEXLS-9

Content focus

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 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 show evidence of each of the stages of designing, producing and evaluating.

Content

Designing

Students:

- identify and creatively document sources of inspiration for a textile project, for example:
  - online graphics or CAD collage creators
  - online collaboration tools
  - mixed media collage
- generate and develop design ideas using drawing and rendering techniques, for example: (ACTDEP049)
  - scaled pencil sketches
  - tonal colouring techniques using watercolour media
  - graphics or CAD drawing programs
- use a variety of techniques to communicate and present the development of design ideas, for example:
  - visual and graphical
  - text based, eg word processing
  - multimedia
  - oral presentation

- identify aesthetic and functional performance criteria of textile items, for example: (ACTDEP051)
  - yellow and blue colours to depict sand and the ocean on a wall hanging
  - 100% cotton, pile weave towel for increased absorbency
  - zipper in an apparel item to enable ease of putting the item on and taking the item off
- experiment with textile materials to determine which are most appropriate for a textile item, for example: (ACTDEK046)
  - testing fabric durability through abrasion tests
  - performance testing of fabrics through moisture absorbency and resistance tests
- justify the selection of materials for a textile item, for example: (ACTDEP051)
  - neoprene fabric for wetsuits used for surfing, water skiing, deep sea diving
  - camouflage clothing for bird watching, wildlife monitoring, military
  - wadding in a quilt for insulation and warmth
  - interfacing in a waistband, facing, collar and cuff to provide dimensional stability and strength

Producing

Students:

- plan and organise the stages involved in the design and production of a textile item to ensure quality completion, for example: (ACTDEK047, ACTDEP052)
  - progress journal
  - student blog
  - graphic organiser, eg Gantt chart, flow chart
- interpret, modify and use commercial patterns and/or produce simple patterns for a textile item, including notions, fabric requirements, instruction sheet, pattern markings and layout, for example:
  - transferring pattern instructions
  - choosing the correct pattern size
- calculate quantity and cost of requirements for a textile item, considering spatial concepts
- plan and document a procedure (sequence) for the construction of a textile item, for example: (ACTDEP052)
  - a word-processing or spreadsheet application to develop a production flow chart
  - a photostory to record the construction of a pair of boxer shorts
  - a short instructional video explaining how to integrate eTextiles
- select and safely use textile equipment to construct a quality textile item, for example: (ACTDEP050)
  - plan and produce a safety procedure for project work
  - threading and operating the sewing machine safely
  - safe use of cutting equipment, eg dressmaker scissors, rotary cutters
- experiment with, select and apply techniques to ensure quality textile items, for example: (ACTDEK046, ACTDEK047)
  - joining fabrics and edge finishes
  - closures
  - colouration and decoration
  - hanging methods for a wall hanging
- identify the labelling requirements of textile items, for example:
  - fibre content
  - country of origin
  - care instructions

- design and produce a product label and swing tag for textile items produced in project work, for example: (ACTDEP050)
  - logo
  - price

Evaluating

Students:

- establish criteria for evaluation of a textile item, for example: (ACTDEP048)
  - functional requirements
  - aesthetic aspects
  - proficiency in manufacturing
- evaluate the designing and producing of a textile item using a variety of techniques including self-evaluation and peer evaluation, for example: (ACTDEP051)
  - a self-reflection record, journal or blog
- use feedback from evaluation to modify project work and ensure a quality result, for example: (ACTDEP051)
  - use project management evaluation tools, eg PMI

Area of study: Design

Outcomes

A student:

› explains the creative process of design used in the work of textile designers TEX5-3
› generates and develops textile design ideas TEX5-4
› investigates and applies methods of colouration and decoration for a range of textile items TEX5-5

Related Stage 4 outcomes: TEX4-3, TEX4-4, TEX4-5

Related Life Skills outcomes: TEXLS-2

Content focus

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.

Content

The practice of textile designers

Students:

- identify the features evident in the design and construction of textile items across the focus areas, Apparel, Furnishings, Costume, Textile Arts and Non-apparel
- identify examples of creative and innovative design
- explore the creative design approaches used by a variety of textile designers (ACTDEP049)
- understand ethical responsibilities surrounding intellectual property, including Indigenous cultural and intellectual property, for example:
  - Aboriginal ownership of cultural knowledge, eg images, artwork
  - inappropriate use of designer brands and logos
- identify a range of textile designers and their applications across focus areas, for example:
  - an Aboriginal and/or Torres Strait Islander designer who uses textiles as a medium of cultural expression
  - fashion designer, eg streetwear, formal wear
  - collaborative textile art produced by communities
  - graphic designers for digital textile printing
- research and communicate information about the creative processes used to design textile items, for example: (ACTDEP052)
  - researching through electronic communication/internet
  - record observations in an online diary/journal/blog
  - brainstorm and collaborate using apps
  - create a pictorial timeline using ICT
- investigate historical, cultural and contemporary sources of inspiration used by textiles designers, for example: (ACTDEK040)
  - cultural traditions represented by Aboriginal and/or Torres Strait Islander designers in hand-printed fabrics
  - Japanese culture represented in *shibori*
  - historical silhouettes represented in contemporary fashions
  - environmental and sustainable influences on contemporary design

- investigate the elements of design, for example:
  - line, direction, shape, size, colour, value and texture
- describe how the elements of design have been used by textile designers
- explain factors affecting the design of one item of a designer's work, for example:
  - function
  - aesthetics
- examine methods of colouration and decoration used by textile designers, for example: (ACTDEK046)
  - dyeing
  - beading, embroidery, appliqué
  - fabric manipulation
  - digital textile printing
- investigate at least one technique of colouration and decoration, for example
  - sublimation printing on a T-shirt
  - fabric manipulation for a cushion or soft furnishing surface
- experiment with colour and decorating methods for a specific end product (ACTDEK046, ACTDEK047)

Area of study: Properties and Performance of Textiles

Outcomes

A student:

› explains the properties and performance of a range of textile items TEX5-1
› justifies the selection of textile materials for specific end uses TEX5-2

Related Stage 4 outcomes: TEX4-1, TEX4-2

Related Life Skills outcomes: TEXLS-1

Content focus

Students explore the unique properties of a range of textiles and the ways in which they perform. By deconstructing a textile item, students gain a broad understanding of how textile items are made.

Content

Performance of textile items

Students:

- identify the performance criteria of textile items, as determined by the end use, for example: (ACTDEP048)
  - an umbrella must be waterproof and mould-resistant
  - a dance costume must allow for quick costume changes
  - a surfboard cover needs to be durable
  - a firefighter uniform needs to be fire resistant and highly visible
- identify design features and manufacturing techniques of textile items, for example: (ACTDEP049)
  - label design features, eg darts, pockets and seams on a shirt
- investigate deconstructed components of textile items, for example:
  - draw pattern pieces and markings, eg grain lines, seam allowance
  - notion requirements, eg buttons, zippers
  - construction techniques
  - deconstruct the sleeve of a knitted jumper, eg pattern shapes, yarn type and quantity

Fabric

Students:

- identify, collect and name common fabrics used in textile items, for example:
  - denim
  - polar fleece
  - organza
  - felt
- identify fabric structures, for example: (ACTDEK046)
  - woven, eg plain weave, twill weave
  - knitted, eg interlock knit
  - non-woven, eg interfacing, wadding, felt, water-soluble fabrics
  - engineered fabrics, eg geotextiles, pond liners, laminates

Yarn

Students:

- identify yarns used in textile items, for example: (ACTDEK046)
  - staple spun yarns
  - filament yarns
  - novelty and textured yarns
  - innovations in yarn production, eg conductive yarns, metallic yarns
- outline structures and properties of yarns used in textile items, for example: (ACTDEK046)
  - staple spun yarns are commonly weak with poor lustre
  - filament yarn is long, continuous, lustrous and strong

Fibre

Students:

- investigate natural, manufactured and fibre blend fabrics to determine the fibre(s) used in textile items, for example: (ACTDEK046)
  - natural fibres, eg wool, cotton, bamboo and silk
  - manufactured fibres, eg polyester and nylon
  - fibre blend, eg polyester/cotton, cotton/elastane
  - testing or experimenting with fabrics to determine fibre content

Properties of fabrics and fibres

Students:

- describe how the functional properties of fabric, yarn and fibre contribute to the performance of textile items, for example: (ACTDEK046)
  - durability, absorbency, flammability, elasticity
  - resilience, eg 5% elastane in woven fabrics used for shirts, jeans
  - knitted fabrics will naturally crease less than woven fabrics

Area of study: Textiles and Society

Outcomes

A student:

› analyses the influence of historical, cultural and contemporary perspectives on textile design, construction and use TEX5-6
› evaluates the impact of textiles production and use on the individual consumer and society TEX5-7

Related Stage 4 outcomes: TEX4-6, TEX4-7

Related Life Skills outcomes: TEXLS-3

Content focus

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.

Content

Historical perspectives of textiles

Students:

- explore the historical, technological and social circumstances that have had an impact on the development of textiles, for example: (ACTDEK040)
  - industrialisation
  - globalisation, eg overseas production
  - technological developments
  - innovative fibre, yarn and fabric
- describe characteristics of design features from different time periods throughout history, for example:
  - 1970s bell bottom denim jeans with embellishment details
  - 1920s dropped waistline, beads, fringing, flapper dress
- identify historic design features in contemporary design, for example:
  - bell sleeves from medieval times appearing in garments of the 1970s and early 2000s
  - Bohemian (Boho) fashion reflects the use of fringing in flapper dresses of the 1920s and hippie fashions of the 1970s

Cultural perspectives of textiles

Students:

- explore textiles as a medium of self-expression
- describe how people from a range of cultures including Aboriginal and/or Torres Strait Islander Peoples use textiles as an expressive and functional medium, for example: (ACTDEK040)
  - *shisha* mirror works in Indian culture to ward off evil
  - woven items produced by Aboriginal Peoples, eg fish traps, baskets
  - elephant foot pattern, in Hmong culture represents prosperity

- investigate the design features of textile items from a range of cultural groups, for example:
  - traditional Korean clothing with empire line
  - Japanese kimono with wide sleeves and wrap front
  - Spanish flamenco frilled skirts
  - New Zealand flax fringe on Māori *piupiu* skirts

Contemporary perspectives of textiles

Students:

- name and describe activities in the Australian textiles industry, for example:
  - designing and pattern making
  - textiles weaving production
  - medical textiles production, eg for health, hygiene and surgical use
  - digital textile printing
- explore career opportunities and pathways in the textiles industry, for example:
  - tertiary studies in fashion and design
  - clothing production courses
  - textile science
  - textile engineering
- investigate the nature of work in the Australian textiles industry, for example: (ACTDEK040, ACTDEK047)
  - Work Health and Safety (WHS) legislation
  - increase in sustainable production practices
  - value-added goods (local production)
  - increase in demand for ethical clothing production
  - niche markets, eg T-shirts sold at music concerts
- examine a variety of factors that affect consumer demand, selection and use of textiles, for example: (ACTDEK040)
  - cost
  - quality
  - sustainability and environmental concerns
- evaluate the marketing strategies of textile-based companies, for example:
  - catalogues
  - social media
  - websites
  - Australian Made labelling
- explore the impact of technology on design and production of textiles, for example:
  - computerised sewing machines to efficiently create buttonholes
  - CAD systems, eg images printed onto T-shirts
  - 3D body scanning
  - computer-aided manufacturing (CAM), eg laser cutting, 3D printing
- investigate the potential impact textiles production has on the environment, for example: (ACTDEK044)
  - pollution, eg fast fashion's contribution to landfill
  - recycling, eg plastic bottles recycled to make fabrics
  - resource management, eg reducing toxic chemicals used in the dyeing process

- describe innovations in textiles, for example: (ACTDEK041)
  - eTextiles, eg programmable microcontrollers, electronic components and conductive threads
  - innovative fibres, eg spider silk, conductive fibres
  - smart tailoring
  - dyeing with air
  - 3D printed textile notions
- describe the benefits of innovation for consumers and/or society, for example: (ACTDEK041)
  - high-performance textiles products, eg sportswear, activewear
  - online shopping
  - the design of a running jacket to include holes for headphones

Years 7–10 Life Skills Outcomes and Content

The Years 7–10 Life Skills outcomes and content are developed from the objectives of the *Textiles Technology Years 7–10 Syllabus*.

Before deciding that a student should undertake a course based on Life Skills outcomes and content, consideration should be given to other ways of assisting the student to engage with the regular course outcomes. This assistance may include a range of adjustments to teaching, learning and assessment activities.

If the adjustments do not provide a student with sufficient access to some or all of the Stage 4 and Stage 5 outcomes, a decision can be explored for the student to undertake Life Skills outcomes and content. This decision should be made through the collaborative curriculum planning process involving the student and parent/carer and other significant individuals. School principals are responsible for the management of the collaborative curriculum planning process.

The following points need to be taken into consideration:

- students are required to demonstrate achievement of one or more Life Skills outcomes
- specific Life Skills outcomes should be selected based on the needs, strengths, goals, interests and prior learning of each student
- achievement of an outcome may be demonstrated through selected Life Skills content
- outcomes may be demonstrated independently or with support.

Further information in relation to planning, implementing and assessing Life Skills outcomes and content can be found in support materials for:

- Technologies
- Special Education
- Life Skills.

Years 7–10 Life Skills Outcomes

Table of objectives and outcomes

Knowledge, understanding and skills

Objective

Students develop:

- knowledge and understanding of the properties and performance of textiles

Life Skills outcome A student:
TEXLS-1 selects fabrics, yarns and fibres appropriate to intended use

Objective

Students develop:

- knowledge and understanding of, and skills in design for a range of textile applications

Life Skills outcome A student:
TEXLS-2 evaluates the design of clothing and household items in terms of function and aesthetics

Objective

Students develop:

- knowledge and understanding of the significant role of textiles for the individual consumer and for society

Life Skills outcome A student:
TEXLS-3 explores factors that influence textile design

Objective

Students develop:

- skills in the creative documentation, communication and presentation of design ideas

Life Skills outcomes A student:
TEXLS-4 gathers and uses information for design purposes **TEXLS-5** uses a variety of techniques to present design ideas and solutions

Objective

Students develop:

- skills in the critical selection and proficient and creative use of textile materials, equipment and techniques to produce quality textile items

Life Skills outcomes A student:
TEXLS-6 demonstrates skills and techniques in the context of a textiles project **TEXLS-7** demonstrates safe practices in the use of equipment and the implementation of techniques **TEXLS-8** undertakes textiles projects

Objective

Students develop:

- knowledge and skills to evaluate quality in the design and construction of textile items

Life Skills outcomes A student:
TEXLS-9 applies appropriate evaluation techniques to a textiles project

Values and attitudes

Students:

- appreciate the contribution and impact of innovation and technologies now and in the future
- appreciate the dynamic nature of textiles and their use to develop solutions for personal, social and global issues
- appreciate the finite nature of some resources and the impact of their use on the environment and society
- value the development of skills and gain satisfaction from their use to solve problems and create quality products.

Years 7–10 Life Skills and Related Syllabus Outcomes

Knowledge, understanding and skills

Objective

Students develop:

- knowledge and understanding of the properties and performance of textiles

Life Skills outcome A student:	**Related Stage 4 and 5 outcomes** A student:
TEXLS-1 selects fabrics, yarns and fibres appropriate to intended use	**TEX4-1** describes the properties and performance of textile items **TEX4-2** suggests appropriate uses for a variety of fabrics, yarns and fibres **TEX5-1** explains the properties and performance of a range of textile items **TEX5-2** justifies the selection of textile materials for specific end uses

Objective

Students develop:

- knowledge and understanding of, and skills in design for a range of textile applications

Life Skills outcome A student:	**Related Stage 4 and 5 outcomes** A student:
TEXLS-2 evaluates the design of clothing and household items in terms of function and aesthetics	**TEX4-3** describes the creative process of design used in the work of textile designers **TEX4-4** generates design ideas for textile items **TEX4-5** uses methods of colouration and decoration of textile items **TEX5-3** explains the creative process of design used in the work of textile designers **TEX5-4** generates and develops textile design ideas **TEX5-5** investigates and applies methods of colouration and decoration for a range of textile items

Objective

Students develop:

- knowledge and understanding of the significant role of textiles for the individual consumer and for society

Life Skills outcome A student:	**Related Stage 4 and 5 outcomes** A student:
TEXLS-3 explores factors that influence textile design	**TEX4-6** describes historical, cultural and contemporary perspectives that influence textile design, construction and use **TEX4-7** identifies factors affecting consumer demand, selection and use of textiles **TEX5-6** analyses the influence of historical, cultural and contemporary perspectives on textile design, construction and use **TEX5-7** evaluates the impact of textiles production and use on the individual consumer and society

Objective

Students develop:

- skills in the creative documentation, communication and presentation of design ideas

Life Skills outcomes A student:	**Related Stage 4 and 5 outcomes** A student:
TEXLS-4 gathers and uses information for design purposes **TEXLS-5** uses a variety of techniques to present design ideas and solutions	**TEX4-8** uses appropriate technology to document, communicate and present design and project work **TEX5-8** selects and uses appropriate technology to creatively document, communicate and present design and project work

Objective

Students develop:

- skills in the critical selection and proficient and creative use of textile materials, equipment and techniques to produce quality textile items

Life Skills outcomes A student:	**Related Stage 4 and 5 outcomes** A student:
TEXLS-6 demonstrates skills and techniques in the context of a textiles project	**TEX4-9** selects and manipulates a range of textile materials **TEX5-9** critically selects and creatively manipulates a range of textile materials to produce quality textile items
TEXLS-7 demonstrates safe practices in the use of equipment and the implementation of techniques	**TEX4-10** uses techniques and equipment safely in the production of quality textile projects **TEX5-10** selects appropriate techniques and uses equipment safely in the production of quality textile projects
TEXLS-8 undertakes textiles projects	**TEX4-11** demonstrates skill in the production of textile projects to completion **TEX5-11** demonstrates competence in the production of textile projects to completion

Objective

Students develop:

- knowledge and skills to evaluate quality in the design and construction of textile items

Life Skills outcome A student:	**Related Stage 4 and 5 outcomes** A student:
TEXLS-9 applies appropriate evaluation techniques to a textiles project	**TEX4-12** identifies aspects of quality in the design and construction of textile items **TEX5-12** evaluates textile items to determine quality in their design and construction

Years 7–10 Life Skills Content

The Years 7–10 Life Skills content is suggested.

Content describes the intended learning for students as they work towards achieving one or more of the Life Skills outcomes. It provides the foundations for students to progress to the next stage of schooling or post-school opportunities.

Teachers make decisions about the choice of outcomes and selection of content regarding the sequence, emphasis and any adjustments required based on the needs, strengths, goals, interests and prior learning of students. Examples provided in the content are suggestions only. Teachers may use the examples provided or use other examples to meet the particular needs of individual students.

The Years 7–10 Life Skills content has been organised around the areas of:

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

These areas provide possible frameworks for addressing Life Skills outcomes and content and are suggestions only. Teachers have the flexibility to develop units of work that will meet the needs, strengths, goals, interests and prior learning of their students.

Focus areas

Focus areas are recognised fields of textiles that direct the choice of student projects. Suggested content may be integrated into project work that addresses one or more of the following focus areas:

- Apparel
- Furnishings
- Costume
- Textile Arts
- Non-apparel

Practical experiences

Where appropriate, students should have the opportunity to develop their knowledge, understanding and skills of designing, producing and evaluating by engaging with a range of practical textile experiences. Students with disability may require adjustments and/or additional support in order to engage in practical experiences.

Further information can be found in Course Structure and Requirements.

Project work

Outcomes

A student:

› gathers and uses information for design purposes TEXLS-4
› uses a variety of techniques to present design ideas and solutions TEXLS-5
› demonstrates skills and techniques in the context of a textiles project TEXLS-6
› demonstrates safe practices in the use of equipment and the implementation of techniques TEXLS-7
› undertakes textiles projects TEXLS-8
› applies appropriate evaluation techniques to a textiles project TEXLS-9

Related Stage 4/5 outcomes: TEX 4-8, TEX4-9, TEX4-10, TEX4-11, TEX4-12, TEX5-8, TEX5-9, TEX5-10, TEX5-11, TEX5-12

Content focus

Students explore the design process and have opportunities to develop skills and confidence in the manipulation and use of a range of textile materials, equipment and techniques. Students investigate ways 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 textile items.

Content

Designing and planning

Students:

- explore the relationship between textile design and purpose, for example:
  - function
  - aesthetics
  - audience
- select information from a variety of sources for design purposes, for example:
  - print and electronic media
  - electronic communication
  - social interaction and communication
- select and apply a variety of techniques to communicate design ideas, for example:
  - design mood boards
  - sketches
  - multimedia presentations
  - graphics or CAD
- plan for the production of a textile item, for example:
  - instructional procedures
  - mind maps
  - audiovisual demonstrations
- identify materials, equipment and techniques needed to complete a textile item, for example:
  - fabric, pattern, notions, yarns, fibres
  - sewing machine, silk screen, crochet hooks, looms
  - embellishing
  - textile item, eg apparel, cushions, wall hangings, French knitted mats, electronic device cover
  - techniques, eg sewing, weaving, knitting, crocheting, felting, macramé, embroidery, dyeing, basketry, ironing, pressing

- identify characteristics of textiles equipment that could make them dangerous, for example:
  - sharpness, eg pins, needles, unpickers, scissors
  - temperature, eg iron, hot water, microwave
  - electrical connections, eg sewing machine, iron
  - weight, eg moving a heavy sewing machine, using an iron
  - chemical safety, eg dyes, printing paste, paints, adhesives

Producing

Students:

- identify and apply safe work practices when transferring textiles equipment, for example:
  - handling and passing scissors
  - carrying heavy sewing machines
- identify and apply safe cutting-out procedures, for example:
  - cut out on a flat surface
  - use fabric scissors
  - check pattern layout before cutting
- identify and apply safe work practices when using a sewing machine, for example:
  - follow classroom safety practices
  - thread machine prior to turning on
  - safe position of hands when the machine is in use
  - avoid sewing over pins
  - turn power off when machine is not in use
- identify and apply safe ironing techniques, for example:
  - adjust the ironing board to the correct height
  - iron fabrics at the correct temperature
  - turn off iron when not in use
- select and apply appropriate laundering techniques for a range of textile items, for example:
  - handwashing of delicate fabrics
  - machine washing of general laundry items, eg T-shirts, jeans
  - dry-cleaning of specialty clothing, eg suits, formal dresses
- select and apply a combination of skills and processes to complete a textiles project, for example:
  - estimate, measure and cut fabric in accordance with a pattern
  - thread and use a sewing machine to assemble a garment or item
  - tie, weave, thread and knot rope for a wall hanging
  - assemble, mould and heat treat for the production of a felted bag
  - attach fastening or embellishment, eg buttons, studs, hooks and eyes
- participate in the production of a textiles project, for example:
  - sew, stamp leather and attach fastenings for a guitar or bag strap
  - dye, weave, knot and embellish a sensory wall hanging
  - pleat, sew and add edge design to recycle a pre-loved garment
  - design, construct and decorate a vest for a formal occasion
  - follow a commercial pattern to produce a reusable shopping bag
  - crochet squares and join to produce a blanket
- develop supporting documentation for a textiles project, for example:
  - inspiration
  - ideas generation
  - fashion illustrations and production drawings, eg CAD, graphics software
  - evaluation

Evaluating

Students:

- reflect on the design and production of a textile project, for example:
  - aesthetic appeal
  - functionality
  - quality of production
  - time management
  - collaboration
- collect feedback on a textile project from a variety of sources, for example:
  - self-reflection
  - peers
  - surveys
  - interviews
- communicate personal ideas and judgements about the finished product, for example:
  - progress journal
  - use ICT to develop portfolios
- evaluate design and production skills, for example:
  - identify skills used and communicate personal proficiency
  - make suggestions on how to enhance skills in the future
  - consider any modifications or adjustments required to the product

Area of study: Design

Outcomes

A student:

› evaluates the design of clothing and household items in terms of function and aesthetics TEXLS-2
› explores factors that influence textile design TEXLS-3
› gathers and uses information for design purposes TEXLS-4
› uses a variety of techniques to present design ideas and solutions TEXLS-5
› applies appropriate evaluation techniques to a textiles project TEXLS-9

Related Stage 4/5 outcomes: TEX4-3, TEX4-4, TEX4-5, TEX4-6, TEX4-7, TEX4-8, TEX4-12, TEX5-3, TEX5-4, TEX5-5, TEX5-6, TEX5-7, TEX5-8, TEX5-12

Content focus

The content in this area of study is covered through an investigation of the work of textile designers. By exploring and considering the practice of textile designers, students have opportunities to model the work of designers in the production of a textile product.

Content

The practice of textile designers

Students:

- identify elements of design represented in a range of textile items, for example:
  - line
  - direction
  - shape
  - colour
  - texture
- identify the elements of design in current fashion textile items, for example:
  - lines in a striped dress, beach towel
  - shape in male and female fashionable pants, eg leggings, shorts, harem, baggy jeans, bell bottom, boot leg, skinny, slim fit
  - texture in a cable jumper
- explore historical, cultural and/or contemporary sources of inspiration used by textile designers, for example:
  - Aboriginal and/or Torres Strait Islander cultural knowledge represented in hand-printed fabrics
  - mapping stories and histories on possum skin cloaks
  - Japanese culture represented in *shibori*
- explore Aboriginal ownership of cultural knowledge, for example:
  - images
  - artworks
- explore the continuity and change of fashion over time, for example:
  - comparing everyday outfits for women and men from 1800s to modern day
  - comparing popular designers of the 20th and 21st centuries

- explore the impact of technology on fashion and design trends, for example:
  - mass production of textiles
  - activewear
  - consider how personal use of technology has influenced fashion, eg holes for headphones
- explore examples of functional and aesthetic features used in a range of everyday clothing and household items, for example:
  - zipper required for a jacket to close
  - gathers in pants to give volume and shape
  - buttons and stitching to add colour
  - elastic in a waistband for size and comfort
  - hemmed edges on towels to finish the edge, give strength and stability
  - hems on the bottom of a curtain to add weight
  - patterns, colours and textures on cushions for aesthetic qualities, eg linking features or a theme within a space
- identify clothing or household items appropriate for a specific end use or target group, for example:
  - age, eg toddlers, the aged
  - occasion, eg themed birthday parties, formal occasions
  - safety, eg fire warning requirements for children's pyjamas, nets on climbing equipment
  - team supports, eg club jersey, hats, scarves

Area of study: Properties and Performance of Textiles

Outcomes

A student:

› selects fabrics, yarns and fibres appropriate to intended use TEXLS-1
› explores factors that influence textile design TEXLS-3
› gathers and uses information for design purposes TEXLS-4
› demonstrates skills and techniques in the context of a textiles project TEXLS-6

Related Stage 4/5 outcomes: TEX4-1, TEX4-2, TEX4-6, TEX4-7, TEX4-8, TEX4-9, TEX5-1, TEX5-2, TEX5-6, TEX5-7, TEX5-8, TEX5-9

Content focus

Students develop an understanding of the unique properties of a range of textile items and the ways in which they perform. By deconstructing a textile item, students develop an understanding of how textile items are made.

Content

Performance of textile items

Students:

- investigate the characteristics and properties of fabric, yarn and/or fibre, for example:
  - absorbency
  - durability
  - flexibility
  - texture
  - elasticity
- identify fibres, yarns and/or fabrics suitable for specific textile items, for example:
  - cotton fibre in towels and socks for absorbency
  - waterproof fabric for raincoats
  - elastane fibre and knit fabric for elasticity in exercise and sporting apparel
  - non-woven, eg washable webs for cleaning cloths, dishcloths
- identify that different manufacturing techniques are required for the construction of a textile item, for example:
  - overlocking to avoid fraying
  - stretch sewing techniques for elastic fabrics
  - starting, stopping and finishing off threads and yarns, eg when sewing, crocheting, macramé, weaving

Fabric

Students:

- identify common fabrics used in clothing and household items, for example:
  - denim, eg jeans
  - satin, eg formal dress, boxer shorts
  - flannelette, eg winter pyjamas, sheets
  - poplin, eg a summer shirt
  - jersey, eg a T-shirt

- select fabrics for a particular purpose and use, for example:
  - cotton drill, eg jeans, workwear
  - terry cloth, eg bath towel
  - knitted fabric, eg underwear, swimwear, sporting wear
- identify fabric structures used in household textiles, for example:
  - woven, eg bed sheets, cushions
  - knitted, eg blankets
  - non-woven, eg dishcloths and wipes, mattress and pillow protectors

Yarn

Students:

- identify a variety of yarns and suggest possible end uses, for example:
  - novelty yarn in a knitted scarf
  - cotton yarns for comfort
  - synthetic multifilament yarns for strength, durability and cost
  - nylon filament for fishing line

Fibre

Students:

- identify common fibres used in the production of textile items, for example:
  - cotton, eg socks, towels
  - wool, eg carpet, jumpers
  - polyester, eg sportswear, raincoats
  - cotton/polyester, eg school shirts

Properties of fabrics and fibres

Students:

- explore fabric properties and the effect on the intended end use, for example:
  - flammability, eg theatre furnishings, pyjamas, fire fighter uniforms
  - absorbency, eg socks, towels
  - durability, eg school uniforms
  - knitted or woven, eg swimwear

Area of study: Textiles and Society

Outcomes

A student:

› evaluates the design of clothing and household items in terms of function and aesthetics TEXLS-2
› explores factors that influence textile design TEXLS-3
› gathers and uses information for design purposes TEXLS-4

Related Stage 4/5 outcomes: TEX4-3, TEX4-4, TEX4-5, TEX4-6, TEX4-7, TEX4-8, TEX5-3, TEX5-4, TEX5-5, TEX5-6, TEX5-7, TEX5-8

Content focus

Students explore the ways in which successful textile designers bring together aspects of historical, cultural and contemporary perspectives to make their designs a relevant expression of the times. Students have opportunities to explore trends in textiles over time and consider how the designs of others influence their own design practices.

Content

Historical perspectives of textiles

Students:

- explore influences from historic periods evident in current fashion trends, for example:
  - gathered skirts, eg Elizabethan era, 1980s
  - long flowing sleeves, eg medieval times, 1960s
- explore the impact of history on fashion and design trends, for example:
  - historic design features in modern textile items
  - fashion cycles, eg denim jeans

Cultural perspectives of textiles

Students:

- investigate the impact of culture on textile items, for example:
  - Aboriginal and/or Torres Strait Islander printed fabrics
  - Indonesian batik fabrics
  - popular culture on fashion trends
  - introduction of screen printing
- identify textiles used in Aboriginal and/or Torres Strait Islander cultures, for example:
  - woven basket to carry foods
  - Torres Strait Islander headdress
  - fish trap
  - possum skin cloak

Contemporary perspectives of textiles

Students:

- explore the impact of technology on design and production of textiles, for example:
  - computerised sewing machines to efficiently create buttonholes
  - CAD systems, eg printed images onto T-shirts
  - 3D body scanning
  - laser cutters
- identify the styles and impact of marketing on the selection of clothing and accessories, for example:
  - compare brand name and generic clothing
  - mass media and social media
  - shopping environment
- identify information on clothing labels to assist consumer, for example:
  - care instructions
  - size
  - fibre content
- identify the roles of workers in the textile industry from growing to end use, for example:
  - farmer, eg growing and production of natural fibres
  - designers, eg pattern making
  - marketing, eg developing an advertising campaign
  - retail, eg selling clothes
  - engineers, eg smart textiles, medical textiles, geotextiles

Assessment

Standards

The NSW Education Standards Authority (NESA) *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 three interrelated elements:

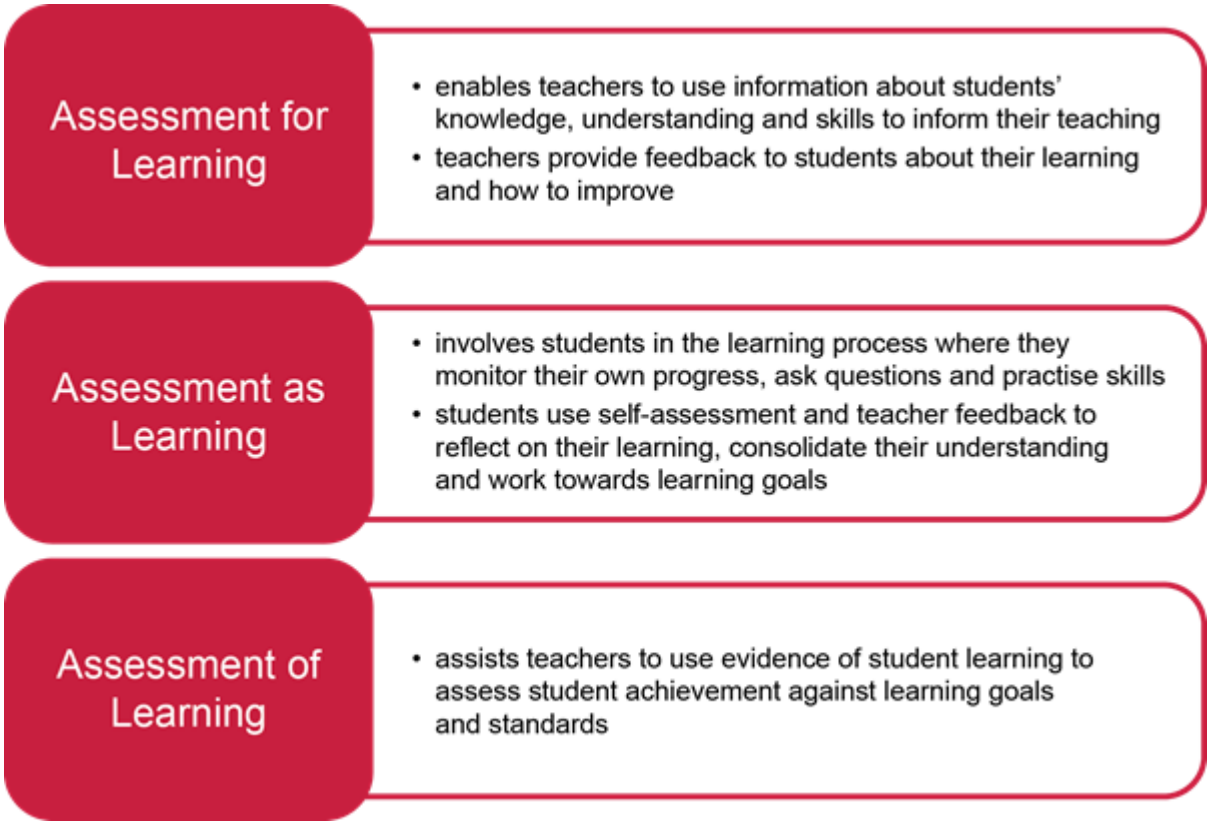
- outcomes and content in syllabuses showing what is to be learned
- Stage statements that summarise student achievement
- samples of work on the NESA website that provide examples of levels of achievement within a Stage.

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

Assessment

Assessment is an integral part of teaching and learning. Well-designed assessment is central to engaging students and should be closely aligned to the outcomes within a Stage. Effective assessment increases student engagement in their learning and leads to enhanced student outcomes.

Assessment for Learning, *Assessment as Learning* and *Assessment of Learning* are three approaches to assessment that play an important role in teaching and learning. The NESA Years K–10 syllabuses particularly promote *Assessment for Learning* as an essential component of good teaching.



Further advice on programming and appropriate assessment practice is provided on the NESA website. This support material provides general advice on assessment as well as strategies to assist teachers in planning education programs.

Assessment for students with disability

Some students with disability will require adjustments to assessment practices in order to demonstrate what they know and can do in relation to syllabus outcomes and content. The type of adjustments and support will vary according to the particular needs of the student and the requirements of the activity. These may be:

- adjustments to the assessment process, for example scaffolded instructions, additional guidance provided, highlighted key words or phrases, the use of specific technology, extra time in an examination
- adjustments to assessment activities, for example rephrasing questions, using simplified language, fewer questions or alternative formats for questions
- alternative formats for responses, for example written point form instead of essays, scaffolded structured responses, short objective questions or multimedia presentations.

It is a requirement under the *Disability Standards for Education 2005* for schools to ensure that assessment tasks are accessible to students with disability. Schools are responsible for any decisions made at school level to offer adjustments to coursework, assessment activities and tasks, including in-school tests. Decisions regarding adjustments should be made in the context of collaborative curriculum planning.

Further examples of adjustments to assessment for students with disability and information on assessment of students undertaking Life Skills outcomes and content can be found in support materials for:

- Technologies
- Special Education
- Life Skills.

Reporting

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

Teachers use assessment evidence to extend the process of Assessment for Learning into their Assessment of Learning. In a standards-referenced framework, teachers make professional judgements about student achievement at key points in the learning cycle. These points 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 student achievement provide schools with a useful tool to report consistent information about student achievement to students and parents/carers, and to the next teacher to help plan the future steps in the learning process.

The A–E grade scale or equivalent provides a common language for reporting by describing observable and measurable features of student achievement at the end of a Stage, within the indicative hours of study. Teachers use the descriptions of the standards to make a professional, on-balance judgement, based on available assessment information, to match each student's achievement to a description. Teachers use the Common Grade Scale (A–E) or equivalent to report student levels of achievement from Stage 1 to Stage 5.

For students with disability, teachers may need to consider, in consultation with their school and sector, the most appropriate method of reporting student achievement. It may be deemed more appropriate for students with disability to be reported against outcomes or goals identified through the collaborative curriculum planning process. There is no requirement for schools to use the Common Grade Scale (A–E) or equivalent to report achievement of students undertaking Life Skills outcomes and content.

Glossary

Glossary term	Definition
3D printing	A process of making three-dimensional solid objects from a digital file. The action or process of making a physical object from a three-dimensional digital model, typically by laying down many thin layers of a material in succession.
Aboriginal and Torres Strait Islander Peoples	Aboriginal Peoples are the first peoples of Australia and are represented by over 250 language groups, each associated with a particular Country or territory. Torres Strait Islander Peoples are represented by five major island groups, and are associated with island territories to the north of Australia's Cape York which were annexed by Queensland in 1879. An Aboriginal and/or Torres Strait Islander person is someone who: • is of Aboriginal and/or Torres Strait Islander descent • identifies as an Aboriginal person and/or Torres Strait Islander person, and • is accepted as such by the Aboriginal and/or Torres Strait Islander community(ies) in which they live.
accessibility	The extent to which a system, environment or object may be used irrespective of a user's capabilities or abilities. For example, the use of assistive technologies to allow people with disability to use computer systems, or the use of icons in place of words to allow young children to use a system.
aesthetics	Aesthetics are concerned with the visual impact or appeal (beauty) of a product or environment and influenced by contemporary, historical or cultural factors. Aesthetics are directly related to the application of the elements of design.
characteristics	When discussing fibre, yarn and fabrics, the characteristics are the qualities used to determine their use and the way people work with them. They can include absorbency, strength and elasticity.
components	Textiles components comprise items other than the fabric used to construct a textile item. Examples of components include buttons, zippers, hooks and eyes. Components may also be referred to as 'notions'. Components may also include electrical and electronic components used in eTextiles.
computer-aided design (CAD)	Software used by designers to create lines and shapes that can be combined, moved, rotated, adjusted and rendered. Measurements and calculations can be included. CAD can be used to create two-dimensional and three-dimensional drawings, such as fashion illustrations, pattern pieces and production drawings. Also known as computer-assisted design.
contemporary	Belonging to or occurring in the present.

Glossary term	Definition
copyright	The protection provided to the creators of original works that offers a legal framework for the control and reproduction or transmission of their creations. Copyright protects written works, computer programs and artistic works such as: architecture, broadcasts, computer programs, drawings, films, music, paintings, photographs, sound recordings and videos.
Country	Country is used by Aboriginal People to describe their territories and ecosystems – a sum total of spiritual beliefs, including Dreamings, all living things, including totems, and all physical factors such as sacred sites, water, air and geographical features.
creative and innovative design	Refers to the creative use of or innovative use of design features, fabric selection, combination of textile materials, application of decorative or construction techniques in a manner that is not commonly used. The features may be uniquely arranged to depict an inspiration or theme.
criteria	A descriptive list of essential features against which success can be measured and evaluated.
deconstructing	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.
decoration	The manipulation of fabric, application of colour or addition of fabric or techniques which are sewn by hand or machine to enhance a design or textile item.
design features	The application of functional and aesthetic elements incorporated to ensure a textile item meets its specific end use. Design features can include decorative techniques such as smocking, or construction techniques such as zippers and seams.
designing	The development of a solution to an identified need or opportunity. Designing involves research and investigation with consideration of human, technical and environmental factors, available resources and time frames. Designs should be tested and evaluated against predetermined criteria.
disability	An umbrella term for any or all of the following components: • impairments: challenges in body function or structure • activity limitations: difficulties in executing activities • participation restrictions: challenges an individual may experience in involvement in life situations. process
diversity	Differences that exist within a group, eg age, sex, gender, gender expression, sexuality, ethnicity, ability/disability, body shape and composition, culture, religion, learning differences, socioeconomic background, values and experience.
eTextiles	Electronic textiles (eTextiles) are innovative textile materials (fabrics, yarns and threads) that incorporate conductive fibres or elements directly into the textile itself. Also known as smart garments, smart clothing, smart textiles, or smart fabrics.

Glossary term	Definition
fabric	The material produced by one of the three main construction techniques: weaving, knitting and non-woven.
fast fashion	An approach to the design, production and marketing of clothing fashions that emphasises making fashion trends quickly and cheaply available to consumers.
fibre	Plant or animal-based materials that can be used for clothing or construction. Animal-based (protein) fibres include silk and wool. Plant-based (cellulosic) fibres include bamboo, cotton and hemp. Manufactured fibres include polyester, viscose, rayon and elastane.
functional	Fabric selection, design details and manufacturing techniques specifically selected to work either individually or collectively to ensure a textile item can be used effectively. For example seams and zippers will increase the performance capabilities to ensure strength and ease of use throughout the product life.
globalisation	The increase of trade and cultural exchange worldwide through the use of a global network of trade, communication, immigration and transportation.
Indigenous	Internationally recognised term for the first people of a land. In New South Wales the term 'Aboriginal person/Peoples' is preferred.
Indigenous cultural and intellectual property	Includes objects, sites, cultural knowledge, cultural expression and the arts, that have been transmitted or continue to be transmitted through generations as belonging to a particular Indigenous group or Indigenous people as a whole or their territory (*see* intellectual property).
industrialisation	A period of social and economic growth during the development of industries in a country or region.
innovation	The action or process of developing new items or changing existing products, systems or environment in order to improve their function, aesthetics or environmental impact.
inspiration	Influences the development of design ideas. Items which give you new and creative ideas.
intellectual property	Non-material assets such as forms of cultural expression that belong to a particular individual or community. Intellectual property rights refer to the rights that the law grants to individuals for the protection of creative, intellectual, scientific and industrial activity, such as inventions (*see* Indigenous cultural and intellectual property, and copyright).
manufacturing techniques	The process of selecting and applying construction methods to complete a textile item. Manufacturing techniques can include seams, seam finishes and closures as well as fabric selection and pattern modification. It also includes knitting, crocheting, macramé and weaving.
marketing strategies	Strategies employed by a company to sell a product. Strategies can include the product, place, price and promotion (often referred to as the 4 Ps).

Glossary term	Definition
medium of self-expression	Converting ideas or imagination into tangible textile items to portray a message, theme, inspiration or imagination. Through the textile item social, cultural and personal factors are expressed, all of which contribute to the final aesthetic and application of techniques.
notion	The small objects or accessories, including items that are sewn or otherwise attached to a textiles article, such as buttons, ribbon, zippers, hooks and eyes.
performance criteria	A set of statements which outline the characteristics and functions a textile item must perform to be considered successful. This can include references to fabric, manufacturing techniques and fabric decoration.
Place	A space mapped out by physical or intangible boundaries that individuals or groups of Torres Strait Islander Peoples occupy and regard as their own. Places are spaces that have varying degrees of spirituality.
project	An individual or collaborative problem-solving activity undertaken by students that is planned to achieve an articulated aim in a design brief.
properties	Distinctive characteristics of a textile that can be identified, tested and used to help people select the one most suitable for a particular use.
rendering	Rendering is the process of creating realistic images by adding colour, shading and texturing to an image. Renderings can be generated using hand techniques or by using software.
social media	Online social networks that enable users to create and share content or to participate in social networking.
sources of inspiration	Refers to places where inspiration or information can be found. For example, inspiration can be gathered from books, magazines, nature, people or the internet. Sources of inspiration can also refer to time periods and events.
sustainable	Supporting the needs of the present without compromising the ability of future generations to meet their needs.
Work Health and Safety (WHS)	The identification of risks and the management of those risks in a workplace. WHS is concerned with the safety, health, and welfare of people in the workplace. The *Work Health and Safety Act 2011* (the WHS Act) provides a framework to protect the health, safety and welfare of all workers at work.
yarn	A strand composed of fibres that are held together by twisting or spinning to create a continuous length.