

## Overview

### Rationale

The study of English is central to the learning and development of all young Australians. It helps create confident communicators, imaginative thinkers and informed citizens. It is through the study of English that individuals learn to analyse, understand, communicate with and build relationships with others and with the world around them. The study of English helps young people develop the knowledge and skills needed for education, training and the workplace. It helps them become ethical, thoughtful, informed and active members of society. In this light it is clear that the Australian Curriculum: English plays an important part in developing the understanding, attitudes and capabilities of those who will take responsibility for Australia's future.

Although Australia is a linguistically and culturally diverse country, participation in many aspects of Australian life depends on effective communication in Standard Australian English. In addition, proficiency in English is invaluable globally. The Australian Curriculum: English contributes both to nation-building and to internationalisation.

The Australian Curriculum: English also helps students to engage imaginatively and critically with literature to expand the scope of their experience. Aboriginal and Torres Strait Islander peoples have contributed to Australian society and to its contemporary literature and its literary heritage through their distinctive ways of representing and communicating knowledge, traditions and experience. The Australian Curriculum: English values, respects and explores this contribution. It also emphasises Australia's links to Asia.

### Aims

The Australian Curriculum: English aims to ensure that students:

- learn to listen to, read, view, speak, write, create and reflect on increasingly complex and sophisticated spoken, written and multimodal texts across a growing range of contexts with accuracy, fluency and purpose
- appreciate, enjoy and use the English language in all its variations and develop a sense of its richness and power to evoke feelings, convey information, form ideas, facilitate interaction with others, entertain, persuade and argue
- understand how Standard Australian English works in its spoken and written forms and in combination with non-linguistic forms of communication to create meaning
- develop interest and skills in inquiring into the aesthetic aspects of texts, and develop an informed appreciation of literature.

### Content Structure

The Australian Curriculum: English Foundation to Year 10 is organised into three interrelated strands that support students' growing understanding and use of Standard Australian English (English). Together the three strands focus on developing students' knowledge, understanding and skills in listening, reading, viewing, speaking and writing. The three strands are:

- **Language:** knowing about the English language
- **Literature:** understanding, appreciating, responding to, analysing and creating literature
- **Literacy:** expanding the repertoire of English usage.

### Strands and sub-strands

Content descriptions in each strand are grouped into sub-strands that, across the year levels, present a sequence of development of knowledge, understanding and skills. The sub-strands are:

# Health and Physical Education

## Overview

### Rationale

Health and Physical Education teaches students how to enhance their own and others' health, safety, wellbeing and physical activity participation in varied and changing contexts. The Health and Physical Education learning area has strong foundations in scientific fields such as physiology, nutrition, biomechanics and psychology which inform what we understand about healthy, safe and active choices. The Australian Curriculum: Health and Physical Education (F–10) is informed by these sciences and offers students an experiential curriculum that is contemporary, relevant, challenging, enjoyable and physically active.

In Health and Physical Education, students develop the knowledge, understanding and skills to strengthen their sense of self, and build and manage satisfying relationships. The curriculum helps them to be resilient, and to make decisions and take actions to promote their health, safety and physical activity participation. As students mature, they develop and use critical inquiry skills to research and analyse the knowledge of the field and to understand the influences on their own and others' health, safety and wellbeing. They also learn to use resources for the benefit of themselves and for the communities with which they identify and to which they belong.

Integral to Health and Physical Education is the acquisition of movement skills, concepts and strategies to enable students to confidently, competently and creatively participate in a range of physical activities. As a foundation for lifelong physical activity participation and enhanced performance, students develop proficiency in movement skills, physical activities and movement concepts and acquire an understanding of the science behind how the body moves. In doing so, they develop an appreciation of the significance of physical activity, outdoor recreation and sport both in Australian society and globally. Movement is a powerful medium for learning, through which students can acquire, practise and refine personal, behavioural, social and cognitive skills.

Health and Physical Education addresses how contextual factors influence the health, safety, wellbeing, and physical activity patterns of individuals, groups and communities. It provides opportunities for students to develop skills, self-efficacy and dispositions to advocate for, and positively influence, their own and others' health and wellbeing.

Healthy, active living benefits individuals and society in many ways. This includes promoting physical fitness, healthy body weight, psychological wellbeing, cognitive capabilities and learning. A healthy, active population improves productivity and personal satisfaction, promotes pro-social behaviour and reduces the occurrence of chronic disease. Health and Physical Education teaches students how to enhance their health, safety and wellbeing and contribute to building healthy, safe and active communities.

Given these aspirations, the Australian Curriculum: Health and Physical Education has been shaped by five interrelated propositions that are informed by a strong and diverse research base for a futures-oriented curriculum:

### Focus on educative purposes

The prime responsibility of the Health and Physical Education curriculum is to describe the progression and development of the disciplinary knowledge, understanding and skills underpinning Health and Physical Education and how students will make meaning of and apply them in contemporary health and movement contexts.

Although the curriculum may contribute to a range of goals that sit beyond its educative purposes, the priority for the Health and Physical Education curriculum is to provide ongoing, developmentally appropriate and explicit learning about health and movement. The Health and Physical Education curriculum draws on its multidisciplinary evidence base to ensure that students are provided with learning opportunities to practise, create, apply and evaluate the knowledge, understanding and skills of the learning area.

### Take a strengths-based approach

The Health and Physical Education curriculum is informed by a strengths-based approach. Rather than focusing only on potential health risks or a deficit-based model of health, the curriculum has a stronger focus on supporting students to develop the knowledge, understanding and skills they require to make healthy, safe and active choices that will enhance their own and others' health and wellbeing.

This approach affirms that all students and their communities have particular strengths and resources that can be nurtured to improve their own and others' health, wellbeing, movement competence and participation in physical activity. The curriculum recognises that students have varying levels of access to personal and community resources depending on a variety of contextual factors that will impact on their decisions and behaviours.

### **Value movement**

Health and Physical Education is the key learning area in the curriculum that focuses explicitly on developing movement skills and concepts students require to participate in physical activities with competence and confidence. The knowledge, understanding, skills and dispositions students develop through movement in Health and Physical Education encourage ongoing participation across their lifespan and in turn lead to positive health outcomes. Movement competence and confidence is seen as an important personal and community asset to be developed, refined and valued.

Health and Physical Education promotes an appreciation of how movement in all its forms is central to daily life — from meeting functional requirements and providing opportunities for active living to acknowledging participation in physical activity and sport as significant cultural and social practices. The study of movement has a broad and established scientific, social, cultural and historical knowledge base, informing our understanding of how and why we move and how we can improve physical performance.

The study of movement also provides challenges and opportunities for students to enhance a range of personal and social skills and behaviours that contribute to health and wellbeing.

### **Develop health literacy**

Health literacy can be understood as an individual's ability to gain access to, understand and use health information and services in ways that promote and maintain health and wellbeing. The Health and Physical Education curriculum focuses on developing knowledge, understanding and skills related to the three dimensions of health literacy:

- functional dimension — researching and applying information relating to knowledge and services in order to respond to a health-related question
- interactive dimension — requires more advanced knowledge, understanding and skills to actively and independently engage with a health issue and to apply new information to changing circumstances
- critical dimension — the ability to selectively access and critically analyse health information from a variety of sources (which might include scientific information, health brochures or messages in the media) in order to take action to promote personal health and wellbeing or that of others.

Consistent with a strengths-based approach, health literacy is a personal and community asset to be developed, evaluated, enriched and communicated.

### **Include a critical inquiry approach**

The Health and Physical Education curriculum engages students in critical inquiry processes that assist students in researching, analysing, applying and appraising knowledge in health and movement fields. In doing so, students will critically analyse and critically evaluate contextual factors that influence decision making, behaviours and actions, and explore inclusiveness, power inequalities, taken-for-granted assumptions, diversity and social justice.

The Health and Physical Education curriculum recognises that values, behaviours, priorities and actions related to health and physical activity reflect varying contextual factors which influence the ways people live. The curriculum develops an understanding that the meanings and interests individuals and social groups have in relation to health practices and physical activity participation are diverse and therefore require different approaches and strategies.

## Aims

The Australian Curriculum: Health and Physical Education (F–10) aims to develop the knowledge, understanding and skills to enable students to:

- access, evaluate and synthesise information to take positive action to protect, enhance and advocate for their own and others' health, wellbeing, safety and physical activity participation across their lifespan
- develop and use personal, behavioural, social and cognitive skills and strategies to promote a sense of personal identity and wellbeing and to build and manage respectful relationships
- acquire, apply and evaluate movement skills, concepts and strategies to respond confidently, competently and creatively in a variety of physical activity contexts and settings
- engage in and enjoy regular movement-based learning experiences and understand and appreciate their significance to personal, social, cultural, environmental and health practices and outcomes
- analyse how varied and changing personal and contextual factors shape understanding of, and opportunities for, health and physical activity locally, regionally and globally.

## Content structure

The curriculum is organised into two content strands — ***Personal, social and community health*** and ***Movement and physical activity***. Each strand contains content descriptions which are organised under three sub-strands.

### Figure 1: Relationship of curriculum elements

## Overview

### Rationale

Geography is a structured way of exploring, analysing and understanding the characteristics of the places that make up our world, using the concepts of place, space, environment, interconnection, sustainability, scale and change. It addresses scales from the personal to the global and time periods from a few years to thousands of years.

Geography integrates knowledge from the natural sciences, social sciences and humanities to build a holistic understanding of the world. Students learn to question why the world is the way it is, reflect on their relationships with and responsibilities for that world, and propose actions designed to shape a socially just and sustainable future.

The concept of place develops students' curiosity and wonder about the diversity of the world's places, peoples, cultures and environments. Students examine why places have particular environmental and human characteristics, explore the similarities and differences between them, investigate their meanings and significance to people and examine how they are managed and changed.

Students use the concept of space to investigate the effects of location and distance on the characteristics of places, the significance of spatial distributions, and the organisation and management of space at different scales. Through the concept of environment students learn about the role of the environment in supporting the physical and emotional aspects of human life, the important interrelationships between people and environments, and the range of views about these interrelationships.

Students use the concept of interconnection to understand how the causal relationships between places, people and environments produce constant changes to their characteristics. Through the concept of sustainability students explore how the environmental functions that support their life and wellbeing can be sustained. The concept of scale helps them explore problems and look for explanations at different levels, for example, local or regional. The concept of change helps them to explain the present and forecast possible futures.

Geography uses an inquiry approach to assist students to make meaning of their world. It teaches them to respond to questions in a geographically distinctive way, plan an inquiry; collect, evaluate, analyse and interpret information; and suggest responses to what they have learned. They conduct fieldwork, map and interpret data and spatial distributions, and use spatial technologies. Students develop a wide range of general skills and capabilities, including information and communication technology skills, an appreciation of different perspectives, an understanding of ethical research principles, a capacity for teamwork and an ability to think critically and creatively. These skills can be applied in everyday life and at work.

### Aims

The Foundation - Year 10 Australian Curriculum: Geography aims to ensure that students develop:

- a sense of wonder, curiosity and respect about places, people, cultures and environments throughout the world
- a deep geographical knowledge of their own locality, Australia, the Asia region and the world
- the ability to think geographically, using geographical concepts
- the capacity to be competent, critical and creative users of geographical inquiry methods and skills
- as informed, responsible and active citizens who can contribute to the development of an environmentally and economically sustainable, and socially just world.

### Content structure

## Overview

### Rationale

History is a disciplined process of inquiry into the past that develops students' curiosity and imagination. Awareness of history is an essential characteristic of any society, and historical knowledge is fundamental to understanding ourselves and others. It promotes the understanding of societies, events, movements and developments that have shaped humanity from earliest times. It helps students appreciate how the world and its people have changed, as well as the significant continuities that exist to the present day. History, as a discipline, has its own methods and procedures which make it different from other ways of understanding human experience. The study of history is based on evidence derived from remains of the past. It is interpretative by nature, promotes debate and encourages thinking about human values, including present and future challenges. The process of historical inquiry develops transferable skills, such as the ability to ask relevant questions; critically analyse and interpret sources; consider context; respect and explain different perspectives; develop and substantiate interpretations, and communicate effectively.

The curriculum generally takes a world history approach within which the history of Australia is taught. It does this in order to equip students for the world (local, regional and global) in which they live. An understanding of world history enhances students' appreciation of Australian history. It enables them to develop an understanding of the past and present experiences of Aboriginal and Torres Strait Islander peoples, their identity and the continuing value of their culture. It also helps students to appreciate Australia's distinctive path of social, economic and political development, its position in the Asia-Pacific region, and its global interrelationships. This knowledge and understanding is essential for informed and active participation in Australia's diverse society.

### Aims

The Australian Curriculum: History aims to ensure that students develop:

- interest in, and enjoyment of, historical study for lifelong learning and work, including their capacity and willingness to be informed and active citizens
- knowledge, understanding and appreciation of the past and the forces that shape societies, including Australian society
- understanding and use of historical concepts, such as evidence, continuity and change, cause and effect, perspectives, empathy, significance and contestability
- capacity to undertake historical inquiry, including skills in the analysis and use of sources, and in explanation and communication.

### Content Structure

The Australian Curriculum: History is organised into two interrelated strands: ***Historical Knowledge and Understanding*** and ***Historical Skills***.

#### Historical Knowledge and Understanding

This strand includes personal, family, local, state or territory, national, regional and world history. There is an emphasis on Australian history in its world history context at Foundation to Year 10 and a focus on world history in the senior secondary years. The strand includes a study of societies, events, movements and developments that have shaped world history from the time of the earliest human communities to the present day.

## Overview

### Preamble

The *Australian Curriculum: Languages* is designed to enable all students to engage in learning a language in addition to English. The design of the Australian Curriculum: Languages recognises the features that languages share as well as the distinctiveness of specific languages.

There are aspects of the curriculum that pertain to all languages. The key concepts of language, culture and learning, as described in the *Shape of the Australian Curriculum: Languages*, underpin the learning area. They also provide the basis for a common rationale and set of aims for all languages.

The Australian Curriculum: Languages includes language-specific curricula for world languages and a *Framework for Aboriginal Languages and Torres Strait Islander Languages*.

### Language, culture and learning

The interrelationship of language, culture and learning provides the foundation for the Australian Curriculum: Languages.

In the languages learning area the focus is on both language and culture, as students learn to communicate meaningfully across linguistic and cultural systems, and different contexts. This process involves reflection and analysis, as students move between the new language being learnt and their own existing language(s). It is a reciprocal and dynamic process which develops language use within intercultural dimensions of learning experiences. It is not a 'one plus one' relationship between two languages and cultures, where each language and culture stay separate and self-contained. Comparison and referencing between (at least) two languages and cultures build understanding of how languages 'work', how they relate to each other and how language and culture shape and reflect experience; that is, the experience of language using and language learning. The experience of being in two worlds at once involves noticing, questioning and developing awareness of how language and culture shape identity.

### Language specificity

The curriculum content and achievement standards are different for each specific language because of inherent differences in the languages themselves.

Each language has its own distinctive structure, systems, conventions for use, related culture(s), place in the Australian and international communities, as well as its own history in Australian education.

### Diversity of language learners

Understanding who learners are, as language learners and as young people, is the starting point for developing their language learning. An increasingly varied range of students now study languages in Australian classrooms. The changing pattern of migration to Australia is extending the range of languages students bring with them to school. Education systems seek to provide for this diversity of language background and for the fact that languages classrooms include students with varying degrees of experience of and proficiency in the language being learnt, as well as their particular affiliations with additional languages.

Learners come to learning languages with diverse linguistic, cultural and personal profiles, bringing distinctive biographies which include individual histories; biographies; previous experiences of and relationships with the target language and particular motivations, expectations, and aspirations.

As unique, social and cultural beings, students interpret the world and make sense of their experiences through their own social and cultural traditions, understanding and values.

Learners of languages in Australia comprise three major groups:

- second language learners
- background language learners
- first language learners.

**Second language learners** are those who are introduced to learning the target language at school as an additional, new language. The first language used before they start school and/or the language they use at home is not the language being learnt.

**Background language learners** are those who may use the language at home, not necessarily exclusively, and have varying degrees of knowledge of and proficiency in the language being learnt. These learners have a base for literacy development in the language.

**First language learners** are users of the language being learnt who have undertaken at least primary schooling in the target language. They have had their primary socialisation as well as initial literacy development in that language and use the target language at home. For Aboriginal languages and Torres Strait Islander languages, first language learners are learners whose primary socialisation is in the language being learnt and who may or may not have yet developed initial literacy.

Within each of these groups, there are differences in proficiency in the language being learnt. It is acknowledged that the span of language experiences of background learners is particularly wide, and learners in this group are likely to have quite diverse affiliations with the target language. Nevertheless, for pragmatic reasons, it is not feasible to identify further groupings.

A framework is being developed for Aboriginal languages and Torres Strait Islander languages that caters for different learner pathways that also take into account the state of the particular language involved.

## Rationale

Through learning languages, students acquire:

- communication skills in the language being learnt
- an intercultural capability, and an understanding of the role of language and culture in communication
- a capability for reflection on language use and language learning.

Language learning provides the opportunity for students to engage with the linguistic and cultural diversity of the world and its peoples, to reflect on their understanding of experience in various aspects of social life, and on their own participation and ways of being in the world.

Learning languages broadens students' horizons in relation to the personal, social, cultural and employment opportunities that an increasingly interconnected and interdependent world presents. The interdependence of countries and communities means people in all spheres of life are required to negotiate experiences and meanings across languages and cultures. Despite its status as a world language, a capability in English only is no longer sufficient. A bilingual or plurilingual capability is the norm in most parts of the world.

Learning languages:

- extends the capability to communicate and extends literacy repertoires
- strengthens understanding of the nature of language, of culture, and of the processes of communication
- develops intercultural capability



- develops understanding of and respect for diversity and difference, and an openness to different experiences and perspectives
- develops understanding of how culture shapes worldviews and extends learners' understanding of themselves, their own heritage, values, culture and identity
- strengthens intellectual, analytical and reflective capabilities, and enhances creative and critical thinking.

Learning languages also contributes to strengthening the community's social, economic and international development capabilities. Language capabilities represent linguistic and cultural resources through which the community can engage socially, culturally and economically, in domains which include business, trade, science, law, education, tourism, diplomacy, international relations, health and communications.

Learning Aboriginal languages and Torres Strait Islander languages meets the needs and rights of young people to learn their own languages and recognises their significance in the language ecology of Australia. For Aboriginal and Torres Strait Islander students, learning their own languages is crucial to overall learning and achievements, to developing a sense of identity and recognition and understanding of language, culture, Country and Place. For all students, learning Aboriginal languages and Torres Strait Islander languages provides a distinctive means of understanding the country in which they live, including the relationship between land, the environment and people. The ongoing and necessary reclamation and revitalisation of these languages also contribute to reconciliation.

## Aims

The Australian Curriculum: Languages aims to develop the knowledge, understanding and skills to ensure students:

- communicate in the target language
- understand language, culture, and learning and their relationship, and thereby develop an intercultural capability in communication
- understand themselves as communicators.

These three aims are interrelated and provide the basis for the two organising strands: Communicating and Understanding. The three aims are common to all languages.

## Content structure

Learner background and time-on-task are two major variables that influence language learning and they provide the basis for the structure of the Australian Curriculum: Languages. These variables are addressed through the specification of content and the description of achievement standards according to pathways and learning sequences respectively.

## Pathways

In the Australian Curriculum: Languages, pathways for second language learners, background language learners and first language learners have been developed as appropriate to cater for the dominant group(s) of students learning each specific language within the current Australian context. For the majority of languages, one curriculum pathway has been developed for Years F–10, catering for the dominant cohort of learners for that language in the current Australian context. For Chinese, pathways have been developed for three learner groups: second language learners, background language learners and first language learners.

The ***Framework for Aboriginal languages and Torres Strait Islander Languages*** includes three learner pathways:

- first language learner pathway
- revival language learner pathway
- second language learner pathway.

## Overview

### Rationale

Learning mathematics creates opportunities for and enriches the lives of all Australians. The Australian Curriculum: Mathematics provides students with essential mathematical skills and knowledge in **Number and Algebra**, **Measurement and Geometry**, and **Statistics and Probability**. It develops the numeracy capabilities that all students need in their personal, work and civic life, and provides the fundamentals on which mathematical specialties and professional applications of mathematics are built.

Mathematics has its own value and beauty and the Australian Curriculum: Mathematics aims to instil in students an appreciation of the elegance and power of mathematical reasoning. Mathematical ideas have evolved across all cultures over thousands of years, and are constantly developing. Digital technologies are facilitating this expansion of ideas and providing access to new tools for continuing mathematical exploration and invention. The curriculum focuses on developing increasingly sophisticated and refined mathematical understanding, fluency, logical reasoning, analytical thought and problem-solving skills. These capabilities enable students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.

The Australian Curriculum: Mathematics ensures that the links between the various components of mathematics, as well as the relationship between mathematics and other disciplines, are made clear. Mathematics is composed of multiple but interrelated and interdependent concepts and systems which students apply beyond the mathematics classroom. In science, for example, understanding sources of error and their impact on the confidence of conclusions is vital, as is the use of mathematical models in other disciplines. In geography, interpretation of data underpins the study of human populations and their physical environments; in history, students need to be able to imagine timelines and time frames to reconcile related events; and in English, deriving quantitative and spatial information is an important aspect of making meaning of texts.

The curriculum anticipates that schools will ensure all students benefit from access to the power of mathematical reasoning and learn to apply their mathematical understanding creatively and efficiently. The mathematics curriculum provides students with carefully paced, in-depth study of critical skills and concepts. It encourages teachers to help students become self-motivated, confident learners through inquiry and active participation in challenging and engaging experiences.

### Aims

The Australian Curriculum: Mathematics aims to ensure that students:

- are confident, creative users and communicators of mathematics, able to investigate, represent and interpret situations in their personal and work lives and as active citizens
- develop an increasingly sophisticated understanding of mathematical concepts and fluency with processes, and are able to pose and solve problems and reason in **Number and Algebra**, **Measurement and Geometry**, and **Statistics and Probability**
- recognise connections between the areas of mathematics and other disciplines and appreciate mathematics as an accessible and enjoyable discipline to study.

### Content structure

The Australian Curriculum: Mathematics is organised around the interaction of three content strands and four proficiency strands.

## Overview

### Rationale

Science provides an empirical way of answering interesting and important questions about the biological, physical and technological world. The knowledge it produces has proved to be a reliable basis for action in our personal, social and economic lives. Science is a dynamic, collaborative and creative human endeavour arising from our desire to make sense of our world through exploring the unknown, investigating universal mysteries, making predictions and solving problems. Science aims to understand a large number of observations in terms of a much smaller number of broad principles. Science knowledge is contestable and is revised, refined and extended as new evidence arises.

The Australian Curriculum: Science provides opportunities for students to develop an understanding of important science concepts and processes, the practices used to develop scientific knowledge, of science's contribution to our culture and society, and its applications in our lives. The curriculum supports students to develop the scientific knowledge, understandings and skills to make informed decisions about local, national and global issues and to participate, if they so wish, in science-related careers.

In addition to its practical applications, learning science is a valuable pursuit in its own right. Students can experience the joy of scientific discovery and nurture their natural curiosity about the world around them. In doing this, they develop critical and creative thinking skills and challenge themselves to identify questions and draw evidence-based conclusions using scientific methods. The wider benefits of this "scientific literacy" are well established, including giving students the capability to investigate the natural world and changes made to it through human activity.

The science curriculum promotes six overarching ideas that highlight certain common approaches to a scientific view of the world and which can be applied to many of the areas of science understanding. These overarching ideas are patterns, order and organisation; form and function; stability and change; systems; scale and measurement; and matter and energy.

### Aims

The Australian Curriculum: Science aims to ensure that students develop:

- an interest in science as a means of expanding their curiosity and willingness to explore, ask questions about and speculate on the changing world in which they live
- an understanding of the vision that science provides of the nature of living things, of the Earth and its place in the cosmos, and of the physical and chemical processes that explain the behaviour of all material things
- an understanding of the nature of scientific inquiry and the ability to use a range of scientific inquiry methods, including questioning; planning and conducting experiments and investigations based on ethical principles; collecting and analysing data; evaluating results; and drawing critical, evidence-based conclusions
- an ability to communicate scientific understanding and findings to a range of audiences, to justify ideas on the basis of evidence, and to evaluate and debate scientific arguments and claims
- an ability to solve problems and make informed, evidence-based decisions about current and future applications of science while taking into account ethical and social implications of decisions
- an understanding of historical and cultural contributions to science as well as contemporary science issues and activities and an understanding of the diversity of careers related to science
- a solid foundation of knowledge of the biological, chemical, physical, Earth and space sciences, including being able to select and integrate the scientific knowledge and methods needed to explain and predict phenomena, to apply that understanding to new situations and events, and to appreciate the dynamic nature of science knowledge.

### Content structure

# Design and Technologies

## Overview

### Rationale

***This rationale complements and extends the rationale for the Technologies learning area.***

In an increasingly technological and complex world, it is important to develop knowledge and confidence to critically analyse and creatively respond to design challenges. Knowledge, understanding and skills involved in the design, development and use of technologies are influenced by and can play a role in enriching and transforming societies and our natural, managed and constructed environments.

The Australian Curriculum: Design and Technologies actively engages students in creating quality designed solutions for identified needs and opportunities across a range of technologies contexts. Students consider the economic, environmental and social impacts of technological change and how the choice and use of technologies contributes to a sustainable future. Decision-making processes are informed by ethical, legal, aesthetic and functional factors.

Through Design and Technologies students manage projects independently and collaboratively from conception to realisation. They apply design and systems thinking and design processes to investigate ideas, generate and refine ideas, plan, produce and evaluate designed solutions. They develop a sense of pride, satisfaction and enjoyment from their ability to develop innovative designed products, services and environments.

Through the practical application of technologies including digital technologies, students develop dexterity and coordination through experiential activities. The subject motivates young people and engages them in a range of learning experiences that are transferable to family and home, constructive leisure activities, community contribution and the world of work.

### Aims

In addition to the overarching aims for the Australian Curriculum: Technologies, Design and Technologies more specifically aims to develop the knowledge, understanding and skills to ensure that, individually and collaboratively, students:

- develop confidence as critical users of technologies and designers and producers of designed solutions
- investigate, generate and critique innovative and ethical designed solutions for sustainable futures
- use design and systems thinking to generate design ideas and communicate these to a range of audiences
- produce designed solutions suitable for a range of technologies contexts by selecting and manipulating a range of materials, systems, components, tools and equipment creatively, competently and safely; and managing processes
- evaluate processes and designed solutions and transfer knowledge and skills to new situations
- understand the roles and responsibilities of people in design and technologies occupations and how they contribute to society.

### Content structure

The Australian Curriculum: Design and Technologies (F–10) comprises two related strands:

- Design and Technologies knowledge and understanding – the use, development and impact of technologies and design ideas across a range of technologies contexts
- Design and Technologies processes and production skills – the skills needed to create designed solutions.

In Design and Technologies, creating designed solutions is also expressed as ‘designing and producing’ or ‘design and produce’ as a means of abbreviating the skills needed to create designed solutions by investigating, generating, producing, evaluating, and collaborating and managing.

## Overview

### Rationale

*This rationale complements and extends the rationale for the Technologies learning area.*

In a world that is increasingly digitised and automated, it is critical to the wellbeing and sustainability of the economy, the environment and society, that the benefits of information systems are exploited ethically. This requires deep knowledge and understanding of digital systems (a component of an information system) and how to manage risks. Ubiquitous digital systems such as mobile and desktop devices and networks are transforming learning, recreational activities, home life and work. Digital systems support new ways of collaborating and communicating, and require new skills such as computational and systems thinking. These technologies are an essential problem-solving toolset in our knowledge-based society.

The Australian Curriculum: Digital Technologies empowers students to shape change by influencing how contemporary and emerging information systems and practices are applied to meet current and future needs. A deep knowledge and understanding of information systems enables students to be creative and discerning decision-makers when they select, use and manage data, information, processes and digital systems to meet needs and shape preferred futures.

Digital Technologies provides students with practical opportunities to use design thinking and to be innovative developers of digital solutions and knowledge. The subject helps students to become innovative creators of digital solutions, effective users of digital systems and critical consumers of information conveyed by digital systems.

Digital Technologies provides students with authentic learning challenges that foster curiosity, confidence, persistence, innovation, creativity, respect and cooperation. These are all necessary when using and developing information systems to make sense of complex ideas and relationships in all areas of learning. Digital Technologies helps students to be regional and global citizens capable of actively and ethically communicating and collaborating.

### Aims

In addition to the overarching aims for the Australian Curriculum: Technologies, Digital Technologies more specifically aims to develop the knowledge, understanding and skills to ensure that, individually and collaboratively, students:

- design, create, manage and evaluate sustainable and innovative digital solutions to meet and redefine current and future needs
- use computational thinking and the key concepts of abstraction; data collection, representation and interpretation; specification, algorithms and implementation to create digital solutions
- confidently use digital systems to efficiently and effectively automate the transformation of data into information and to creatively communicate ideas in a range of settings
- apply protocols and legal practices that support safe, ethical and respectful communications and collaboration with known and unknown audiences
- apply systems thinking to monitor, analyse, predict and shape the interactions within and between information systems and the impact of these systems on individuals, societies, economies and environments.

### Content structure

The Australian Curriculum: Digital Technologies (F–10) comprises two related strands:

- Digital Technologies knowledge and understanding – the information system components of data, and digital systems (hardware, software and networks)
- Digital Technologies processes and production skills – using digital systems to create ideas and information, and to define, design and implement digital solutions, and evaluate these solutions and existing information systems against specified criteria.

## Overview

### Introduction

In the Australian Curriculum, the Arts is a learning area that draws together related but distinct art forms. While these art forms have close relationships and are often used in interrelated ways, each involves different approaches to arts practices and critical and creative thinking that reflect distinct bodies of knowledge, understanding and skills. The curriculum examines past, current and emerging arts practices in each art form across a range of cultures and places.

The Australian Curriculum: The Arts Foundation to Year 10 comprises five subjects:

- Dance
- Drama
- Media Arts
- Music
- Visual Arts

Each subject focuses on its own practices, terminology and unique ways of looking at the world.

In Dance, students use the body to communicate and express meaning through purposeful movement. Dance practice integrates choreography, performance, and appreciation of and responses to dance and dance making.

In Drama, students explore and depict real and fictional worlds through use of body language, gesture and space to make meaning as performers and audience. They create, rehearse, perform and respond to drama.

In Media Arts, students use communications technologies to creatively explore, make and interpret stories about people, ideas and the world around them. They engage their senses, imagination and intellect through media artworks that respond to diverse cultural, social and organisational influences on communications practices today.

In Music, students listen to, compose and perform music from a diverse range of styles, traditions and contexts. They create, shape and share sounds in time and space and critically analyse music. Music practice is aurally based and focuses on acquiring and using knowledge, understanding and skills about music and musicians.

In Visual Arts, students experience and explore the concepts of artists, artworks, world and audience. Students learn in, through and about visual arts practices, including the fields of art, craft and design. Students develop practical skills and critical thinking which inform their work as artists and audience.

The Australian Curriculum: The Arts Foundation to Year 10 enables exploration of the dynamic relationships between Arts subjects. This can involve students making and responding to artworks in traditional, contemporary and emerging forms, using materials, techniques and technologies from one Arts subject to support learning in another. In this twenty-first century Arts curriculum, students explore innovative and hybrid art forms which extend and challenge art making and combine practices of two or more art forms.

Within all Arts subjects, design facilitates the creative and practical realisation of ideas. Design thinking is a fundamental strategy in the experimentation, refinement and resolution of an artwork and takes into account logical, critical and aesthetic considerations. Many different words describe design within the Arts such as choreographing, narrating, devising, constructing, composing and sculpting. Design connects the different art forms so that they inform each other, providing possibilities for students to create innovative and hybrid forms of art.

## Rationale

The Arts have the capacity to engage, inspire and enrich all students, exciting the imagination and encouraging them to reach their creative and expressive potential. The five Arts subjects in the Australian Curriculum are Dance, Drama, Media Arts, Music, and Visual Arts. Together they provide opportunities for students to learn how to create, design, represent, communicate and share their imagined and conceptual ideas, emotions, observations and experiences.

Rich in tradition, the Arts play a major role in the development and expression of cultures and communities, locally, nationally and globally. Students communicate ideas in current, traditional and emerging forms and use arts knowledge and understanding to make sense of their world. The Australian Curriculum: The Arts values, respects and explores the significant contributions of Aboriginal and Torres Strait Islander Peoples to Australia's arts heritage and contemporary arts practices through their distinctive ways of representing and communicating knowledge, traditions and experience. In the Arts, students learn as artists and audience through the intellectual, emotional and sensory experiences of the Arts. They acquire knowledge, skills and understanding specific to the Arts subjects and develop critical understanding that informs decision making and aesthetic choices. Through the Arts, students learn to express their ideas, thoughts and opinions as they discover and interpret the world. They learn that designing, producing and resolving their work is as essential to learning in the Arts as is creating a finished artwork. Students develop their Arts knowledge and aesthetic understanding through a growing comprehension of the distinct and related languages, symbols, techniques, processes and skills of the Arts subjects. Arts learning provides students with opportunities to engage with creative industries and arts professionals.

The Arts entertain, challenge, provoke responses and enrich our knowledge of self, communities, world cultures and histories. The Arts contribute to the development of confident and creative individuals, nurturing and challenging active and informed citizens. Learning in the Arts is based on cognitive, affective and sensory/kinaesthetic response to arts practices as students revisit increasingly complex content, skills and processes with developing confidence and sophistication across their years of learning.

This rationale is extended and complemented by specific rationales for each Arts subject.

## Aims

The Australian Curriculum: The Arts aims to develop students':

- creativity, critical thinking, aesthetic knowledge and understanding about arts practices, through making and responding to artworks with increasing self-confidence
- arts knowledge and skills to communicate ideas; they value and share their arts and life experiences by representing, expressing and communicating ideas, imagination and observations about their individual and collective worlds to others in meaningful ways
- use of innovative arts practices with available and emerging technologies, to express and represent ideas, while displaying empathy for multiple viewpoints
- understanding of Australia's histories and traditions through the Arts, engaging with the artworks and practices, both traditional and contemporary, of Aboriginal and Torres Strait Islander Peoples
- understanding of local, regional and global cultures, and their Arts histories and traditions, through engaging with the worlds of artists, artworks, audiences and arts professions.

These aims are extended and complemented by specific aims for each Arts subject.



## Overview

### Introduction

The Australian Curriculum: Work Studies, Years 9–10 has been written in response to key work-related issues facing young people today and into the future. This is a world-leading, future-oriented curriculum, equal in quality, value and rigour to more traditional academic programs. It is designed for all students, whether they pursue a vocational or an academic path.

Rapid technological advances are impacting on work and will reshape its future. Technological change has led to increased digitisation and automation, and influences the way we communicate. The resulting globalisation affects how, where, when and why people work.

Australian industries and enterprises face unprecedented global competition and pressure for increased productivity. This, in turn, contributes to an unpredictable work future for young people, where routine job opportunities are limited, and outsourcing, contract work and flexible work arrangements are the norm. School leavers can no longer anticipate a single job or single-track career for a lifetime and will be encountering jobs which currently do not exist.

The skills and capabilities needed to prosper in this new, knowledge-focused world will differ from those of the past. Young people will need a set of personal and interpersonal capacities, wide-ranging global awareness and the flexibility to manage rapid change and transition.

Work Studies Years 9–10 is an applied learning curriculum that adapts discipline-based learning to work contexts. This requires a variation in the approach to curriculum design and content descriptions and elaborations, as they need to be active. It also allows for a cross-curriculum disciplinary mode of delivery.

### Rationale

Work has intrinsic value and is a fundamental part of everyday life. It fosters human dignity, independence and a sense of personal worth. It is recognised as a right of all people.

In an increasingly globalised world, the nature of work is changing and the knowledge, skills and attributes needed to engage with the emerging challenges and opportunities differ from those of the past. The *Australian Curriculum: Work Studies, Years 9–10* concentrates on the capacities individuals need for full and effective participation in life, learning and work.

The curriculum helps young people plan for and shape their future and make a contribution to the wider community by providing them with the essential knowledge, understanding and skills for participation in the rapidly changing world of work.

Students begin preparation for the working world by developing understanding of themselves in relation to work, recognising their aspirations, their rights and responsibilities as workers, as well as employer expectations and the diversity of work opportunities. They learn to understand what work is, how and why it is changing and what this means for their future in working for others or themselves. They engage with the career management processes needed to adapt to multiple transitions in work and life, and use opportunities to transfer their developing knowledge, understanding and skills to a range of work-related contexts and projects.

Through exposure to work-related learning, students develop the self-knowledge, contemporary work skills and entrepreneurial behaviours and resilience necessary to thrive in the 21<sup>st</sup> century. They appreciate the role of collaboration, creativity and analytical skills in workplaces and the importance of cultural diversity and ethical practices.



## Aims

The *Australian Curriculum: Work Studies, Years 9–10* aims to ensure that students in Years 9 and 10 develop:

- knowledge of the world of work and the importance of lifelong learning
- capacities to manage careers, change and transitions in an uncertain and changing future
- literacy, numeracy, ICT and interpersonal skills to work, interact and communicate successfully with others in diverse contexts, using appropriate behaviours and protocols
- skills and resilience to meet the demands of their present and future learning and work.

## Nature of work studies

### Applied learning

Practically-based learning in realistic contexts is recognised internationally as being important for students in preparing for the world of work.

Applied learning is essentially teacher-guided and student-centred. The role of the learner is integral to applied learning and the student plays an active role in managing the processes of applying knowledge. Through applied learning experiences, students broaden and deepen their understanding and are able to plan and guide their own learning.

The *Australian Curriculum: Work Studies, Years 9–10* engages students in transferring work-related knowledge and understanding to activities that involve the world of work. Students concentrate on learning and applying the knowledge, understanding and skills they need to solve a problem or implement a project relevant to work or workplaces.

As students take greater responsibility for managing the processes of applying their knowledge, they practise and further develop the critical skills and characteristics that are important for work and daily life in the 21<sup>st</sup> century. These include organisation, decision-making, collaboration and teamwork, problem-solving, risk-taking, critical thinking, creativity, adaptability and resilience.

By using their knowledge in realistic situations, students gain a better understanding of work and places of work. They see the relevance and purpose of their learning, which increases their motivation. By practising skills in complex realistic situations, students test and adjust their understandings in relation to what they learn at school.

Structured reflection and feedback are fundamental to the success of applied learning. Where students are given opportunities and time to reflect on learning and engage in feedback from peers and adults, their knowledge and understanding are deepened and broadened, and the relevance of learning becomes more apparent.

Activities such as debriefing sessions and keeping journals encourage students to review their work-related experiences methodically and reflect on their meaning and how knowledge and skills can be transferred to new situations. Transferability of knowledge and skills to different contexts is critical to the successful management of change and transition in the world of work.

### Work exposure

Work exposure promotes learning in a wide variety of environments, for example, by bringing the world of work into the classroom and taking the classroom to the world of work. It provides a platform for applied learning experiences and is an integral element of the Work Studies Years 9–10 curriculum. Work exposure is embedded in content descriptions and elaborations, making it integral to the curriculum. Work exposure opportunities are not intended to be restricted to the traditional practice of blocks of work experience, although work experience may take up part of work exposure.

- Rather, work exposure can take many forms including:
  - direct involvement in the workplace
  - visits to and from private and public enterprises and community organisations
  - visits to and from industry experts, employers, employees, self-employed people