#### Curriculum Framework

for Kindergarten to Year 12 Education in
Western Australia



Published by the Curriculum Council 27 Walters Drive, Osborne Park, Western Australia, Postcode 6017.

Telephone: (08) 9273 6300 Facsimile: (08) 9273 6301

E-mail: info@curriculum.wa.edu.au Website: http://www.curriculum.wa.edu.au

#### © Curriculum Council, Western Australia, 1998

This book draws on material contained in the curriculum statements and profiles for Australian schools published by the Curriculum Corporation. Reprinted by permission of the publisher.

The text contained in this document may be reproduced in any form. All rights are reserved on photographic images.

Additional copies of this publication may be obtained from the Curriculum Council.

SCIS No: 940149

ISBN 0 7307 2701 7

We gratefully acknowledge the contribution of photographic images and work samples provided by systems, sectors and individual schools.







The Curriculum Framework represents a major step forward in the reform of school curriculum in Western Australia. It is built upon a commitment to the philosophy that learning is continuous and the essential purpose is to improve the learning and achievement of all students.

The Framework establishes learning outcomes expected of all students from kindergarten to year 12. These learning outcomes aim to ensure that all students in Western Australia have the knowledge, understandings, skills and values necessary to participate and prosper in a changing world and new millenium. They also aim to ensure that students achieve their personal best and develop a sense of pride in themselves, their schools, their environment and their society.

Rather than being prescriptive about what must be taught, the Curriculum Framework will be used by schools to develop and implement their teaching and learning programs according to the needs and characteristics of their students.

One of the most pleasing aspects of the Curriculum Framework is that in addition to many expert committees, there has been considerable public involvement in its development. Almost ten thousand teachers, parents, academics, curriculum officers, students and other members of the community have contributed to the development of the Framework.

The involvement of so many people gives me confidence that students will significantly benefit as teachers implement the Curriculum Framework from next year.

**COLIN J BARNETT** 

MINISTER FOR EDUCATION





Hon Colin J Barnett Minister for Education 19th Floor 197 St George's Terrace PERTH WA 6000

#### Dear Minister

We are pleased to submit to you the inaugural Curriculum Framework, which was approved by the Council under Section 9(b) of the Curriculum Council Act 1997 at its June 1998 meeting. The Curriculum Framework is set out in the attached document *The Curriculum Framework for Kindergarten to Year 12 Education in Western Australia.* 

In developing the Curriculum Framework, we have incorporated the collaborative and consultative processes recommended in the *Review of School Curriculum Development Procedures and Processes in Western Australia*. As a consequence, almost ten thousand teachers, students, parents, academics, curriculum officers and other members of the community have contributed to the development, review and writing of the Curriculum Framework. We believe that the Curriculum Framework is now ready for implementing in schools, including government, non-government and home schools. In considering its likely impact on schools, the Council believes that the implementation ought to be phased in over a five-year period, so that by 2004 the Curriculum Framework will be fully operational in all schools.

In accordance with Section 10(2) of the *Curriculum Council Act* 1997, the Council now seeks your approval to give a direction for education providers (defined in the Act as government, nongovernment and home schools) to commence implementing the Curriculum Framework in accordance with the requirements and timetable set out in the Background Section of this document.

Yours faithfully

Luley Marken

Professor Lesley Parker (Chair)

Therese Temby (Deputy Chair)

Therese Temby

Paul Albert

John Barich

Barbara Bosich

Lucina Cross

Malcolm Coff

Mike Keely

Dianne Kerr

Jeremy Madin

Lyndon Rowe

David Treloar

Cheryl Vardon

#### Contents

FOREWORD	
LETTER OF TRANSMITTAL	
BACKGROUND	6
OVERARCHING STATEMENT	11
LEARNING AREA STATEMENTS	
The Arts	49
English	81
Health and Physical Education	113
Languages Other Than English	145
Mathematics	177
Science	217
Society and Environment	249
Technology and Enterprise	289
APPENDIX	
Acknowledgements	321
Core shared values	324



#### **Background**

#### PURPOSE OF THE CURRICULUM FRAMEWORK

The Curriculum Framework sets out what all students should know, understand, value and be able to do as a result of the programs they undertake in schools in Western Australia, from kindergarten through to year 12. Its fundamental purpose is to provide a structure around which schools can build educational programs that ensure students achieve agreed outcomes.

It is neither a curriculum nor a syllabus, but a framework identifying common learning outcomes for all students, whether they attend government or non-government schools or receive home schooling. It is intended to give schools and teachers flexibility and ownership over curriculum in a dynamic and rapidly-changing world environment.

#### AN OUTCOMES FOCUS

The Curriculum Framework makes explicit the learning outcomes which all Western Australian students should achieve. This focus on outcomes represents a major shift in school curriculum from a focus on educational inputs and time allocation toward one that emphasises the desired results of schooling.

The Curriculum Framework establishes learning outcomes for all students, regardless of who they are, which school they attend, where they are from, or what approach their school takes to help them achieve those outcomes. These learning outcomes are set out in this document within the Overarching and eight Learning Area Statements.

Schools and teachers will use the Curriculum Framework to develop their own learning and teaching programs according to their circumstance, ethos and the needs of their students.

The Curriculum Framework does not prevent schools from offering programs that enable students to achieve outcomes additional to those specified in this document.

#### BACKGROUND TO THE CURRICULUM FRAMEWORK

The Review of School Curriculum Development Procedures and Processes in Western Australia (1995), identified a number of priorities in curriculum, including the need for:

a common curriculum direction, a more even spread of curriculum support
materials and the provision of professional development aligned with curriculum
change to enable schools to develop and adapt curriculum to the advantage of their
students;



- · a seamless curriculum among the different levels of schooling; and
- greater involvement by non-government schools and the community in Statewide curriculum development processes.

The key recommendation arising from the Review was the creation of a Curriculum Council, with responsibility for developing a Curriculum Framework for all schools.

#### DEVELOPING THE CURRICULUM FRAMEWORK

Before the establishment of the Curriculum Council in August 1997, an Interim Curriculum Council published a Draft Curriculum Framework for public consultation. In preparing the document, the Interim Curriculum Council was supported by an extensive committee structure. Membership of these committees was broadly based, including people from schools, education sectors and the community.

Seven months of consultation took place. The Draft Curriculum Framework was distributed to all teachers and to many other groups and individuals who had contributed to its development. A series of public meetings provided opportunities for discussion, debate and the sharing of ideas.

The views gathered during the consultation process were considered by the Curriculum Council's Curriculum Framework Committee. A number of review groups were also convened to provide advice on how the feedback should best be incorporated. Almost ten thousand teachers, parents, academics, curriculum officers, students and other members of the community contributed to the development, review and rewriting of the Curriculum Framework.

#### POST-COMPULSORY SCHOOLING

The subjects studied in the post-compulsory years are an intrinsic part of the scope of schooling defined in this Curriculum Framework. Students studying these subjects, will achieve to varying degrees, depending upon the subject, the outcomes set out in the Curriculum Framework.

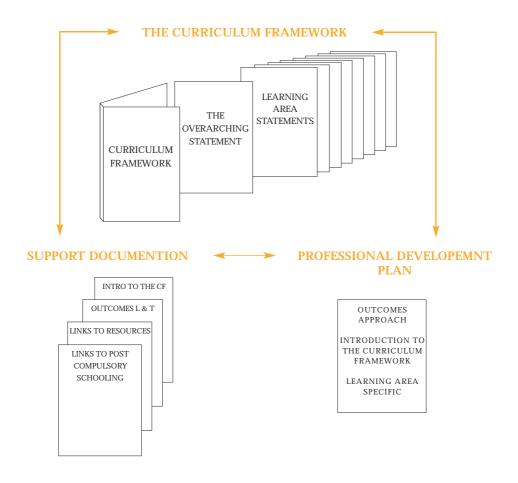
The accreditation, assessment, moderation and certification functions associated with years 11 and 12 courses of study are administered by the Curriculum Council. These courses of study cover specialised subjects and take into consideration the post-school destinations of students.

The relationship between the Curriculum Framework and subjects provided in years 11 and 12 will be set out in the Curriculum Council Syllabus Manuals as they are reviewed for publication. The Syllabus Manuals will show how students can work toward learning outcomes described in the Curriculum Framework as well as specialising in a particular aspect or aspects of the learning area. In some instances these specialised courses and programs may include content, processes and assessment practices which are beyond the scope of the common Curriculum Framework.



#### PROFESSIONAL DEVELOPMENT AND CURRICULUM SUPPORT MATERIALS

Professional development and curriculum support materials for teachers and schools are considered to be essential for the Curriculum Framework concept to work.



#### VALUES IN THE CURRICULUM FRAMEWORK

Values are fundamental to shaping curriculum. In recognition of this, the Curriculum Council has identified and endorsed as one of its Principles, a set of core shared values to underpin the Curriculum Framework (page 14).

The Overarching Statement provides an overview of the five clusters of core shared values while the expanded set of thirty-two values is listed on the inside back cover of this document. Each of the eight learning area statements explicitly or implicitly endorses these values in a manner suited to the area.

The agreed values have been created through a process of consensus and wide consultation. Systems, sectors and schools may add to this minimum set or interpret and promote the values in relation to their particular school ethos or mission statement. The five clusters of thirty-two values are a starting point for systems, sectors and schools to integrate values into their learning and teaching programs.



#### THE CURRICULUM FRAMEWORK IS FOR ALL STUDENTS

The Curriculum Framework is an inclusive framework for all students in Western Australia. Inclusivity means ensuring that all groups of students are included and valued.

The Curriculum Framework does this by:

- specifying a wide and empowering set of outcomes for students to achieve;
- providing a basis for programs that challenge all students and offer all groups of students opportunities to achieve these outcomes;
- recognising and valuing the different knowledge and experience of different groups of students: and
- taking into account the diversity among children and young adults in this State: for example, in terms of gender, languages, culture, learning capacity, socioeconomic background and geographic location.

A small number of students with specific physical or intellectual disabilities may not be able to participate fully in activities and programs designed to achieve certain outcomes set out in the Curriculum Framework.

#### IMPLEMENTATION OF THE CURRICULUM FRAMEWORK

In accordance with the *Curriculum Council Act*, 1997, the Curriculum Framework sets out "...the knowledge, understandings, skills, values and attitudes that students are expected to acquire" (Section 4(b)). The Curriculum Framework describes these requirements as a series of learning outcomes set out in the Overarching and eight Learning Area Statements.

These learning outcomes comprise the mandatory element of the Curriculum Framework which all schools in Western Australia must either implement or obtain an exemption from doing so from the Minister for Education. In addition, there are reporting requirements as agreed between the Council and the governing bodies of systems, sectors and schools.

Implementing the Curriculum Framework means that when teachers and schools design and develop learning and teaching programs to suit the needs of their students, they must ensure that these programs include learning opportunities and enriching experiences for their students aimed at achieving the outcomes set out in the Framework.

How a school structures learning opportunities in terms of time and the range of courses and programs provided, remains the school's responsibility. This will depend on the school or teacher's assessment of students and their particular needs.



Implementing the mandatory parts of the Curriculum Framework does not mean that students are required to focus on all of the learning outcomes in each year of their schooling. There will be times when particular learning outcomes will need to be emphasised. There will be some periods (for example, in the early childhood and late adolescent years) when some of the learning outcomes are not included in the learning and teaching programs of the students. However, over the entire period of schooling of each student, it is expected that he or she will have been given engaging and enriching learning experiences to achieve the Curriculum Framework's learning outcomes.

Reporting on implementation of the Curriculum Framework will occur though a process agreed between the Council and the school systems and sectors. Schools will be advised through their governing bodies as to the information required for determining their progress in implementing the Framework. In this way, schools are also able to recommend improvements to the Framework.

#### **EXEMPTIONS**

There may be circumstances in which a school is unable to implement a particular learning area statement or learning outcomes set out in the Framework at any stage of schooling. Schools wishing to seek such an exemption should make application to the Minister for Education through the Curriculum Council. Information on this process is available from the Council.

#### IMPLEMENTATION TIMETABLE

1999 First year of implementation

**2004** The Curriculum Framework is fully implemented in all schools

#### ADAPTATION AND REVIEW

The Curriculum Framework is a long-term educational reform. As sectors, systems and schools work with the Framework, they will find that adjustments are made to their learning and teaching programs.

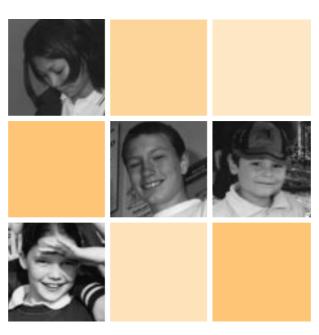
Similarly, the Curriculum Council will make adjustments to the Curriculum Framework to take account of school-based issues arising from the experience of implementation. The Framework will be modified to take account of social and educational trends and changing community expectations.

Further development, review and revision of the Curriculum Framework will be subject to collaborative and consultative processes before being incorporated into the Curriculum Framework.



## THE OVERARCHING STATEMENT

The Curriculum Framework for Kindergarten to Year 12 Education in Western Australia



The Overarching Statement provides an overview of curriculum for Western Australian schools. It describes the principles underpinning curriculum. It sets out the overarching outcomes to which all learning areas contribute. It outlines the scope of the curriculum and teaching, learning and assessment strategies which help to ensure that students achieve outcomes.



#### The Overarching Statement

#### INTRODUCTION

Curriculum is at the heart of education.

The Curriculum Framework for Kindergarten to Year 12 Education in Western Australia aims to improve the learning outcomes of all students and to enable schools to develop learning and teaching programs which meet the needs of their students and which respond to changes in society.

The great majority of students will spend fourteen years of their lives in schooling. It is important that during this time they develop the tools to deal effectively with the opportunities and challenges which they encounter, both now, as young people, and in the future, as adults. Our society is characterised by rapid technological development, increasing cultural diversity and changing family and institutional structures. Changes in the nature of work, the growing interdependence of world communities, global environmental issues and social, political and economic conditions will continue to pose challenges and offer opportunities throughout the twenty-first century.

The Curriculum Framework reflects contemporary thinking about what students need to learn in order to lead successful and rewarding lives in the twenty-first century and how schools and teachers can best help them to learn. It provides teachers, parents, employers, those responsible for post-school education and the community with a clear statement of what students are expected to achieve as a result of their kindergarten to year 12 education.

The Framework helps teachers to develop specific programs and judge the effectiveness of their teaching by the outcomes students achieve. It provides a basis for schools to review their performance and plan for improvement. It is used by those responsible for the education of mature-aged students returning to education or students not in formal school situations. It forms the basis of support documents and resources and of professional development for teachers.



#### KEY FEATURES OF THE CURRICULUM FRAMEWORK

The Curriculum Framework has two key features which make it different from previous syllabus documents: its focus on outcomes and its kindergarten to year 12 approach.

#### The focus on outcomes

An outcomes approach means identifying what students should achieve and focusing on ensuring that they do achieve. It means shifting away from an emphasis on what is to be taught and how and when, to an emphasis on what is actually learnt by each student.

Some schools in Western Australia have been moving towards an outcomes approach for some time. The implementation of the Curriculum Framework will advance the process for all schools.

The Framework sets out a series of outcomes agreed to be essential for all students to achieve. These outcomes describe what students should know, understand, value and be able to do as a result of their curriculum experiences. Students achieve the outcomes at increasing levels of complexity as they progress through their schooling.

The agreed outcomes form a common core of achievement. The outcomes-focused approach will provide schools with more flexibility to enable teachers to develop different learning and teaching programs to help their particular students achieve the outcomes. Schools will respond to their own ethos or that of their system, the needs of their community and the situations of their students by pursuing the common outcomes and by developing additional outcomes that match the specific needs of the students.

The outcomes provide clarity of focus for students, parents, teachers and the general community and are an effective basis for monitoring and reporting to parents and others.

#### The K-12 approach

Another important feature of the Framework is its kindergarten to year 12 approach. While particular stages of schooling make unique contributions and may require different approaches, the K-12 approach adopted by the Framework provides a picture of the total span of students' schooling. It encourages a developmental and integrated approach to curriculum planning, teaching and learning. It enables students to progress smoothly through their education and avoids the major disjunctions between stages of schooling evident in some previous approaches to curriculum. It provides the basis for continuity and consistency in students' education.



#### THE STRUCTURE OF THE CURRICULUM FRAMEWORK

The Curriculum Framework consists of this Overarching Statement and eight Learning Area Statements.

#### The Overarching Statement

This Overarching Statement outlines seven key principles which underpin the Curriculum Framework and describes the Overarching learning outcomes to which all learning areas contribute. It describes learning and assessment strategies that are consistent with the Curriculum Framework and which promote achievement of the outcomes.

Particular attention is given to the importance of maintaining a holistic view of curriculum, the responsibility of curriculum as a whole for such vital skills as literacy, numeracy and social cooperation, and the need to integrate knowledge, skills and values across all learning areas. The fundamental role of curriculum in the promotion of students' enjoyment of learning and excellence in learning is also emphasised. This statement provides a guide for whole-school planning and review.

#### The Learning Area Statements

Learning areas individually and collectively contribute to the achievement of the Overarching learning outcomes. Learning Area Statements are provided for The Arts; English; Health and Physical Education; Languages Other Than English; Mathematics; Science; Society and Environment; and Technology and Enterprise. These areas are a useful way of categorising the knowledge, skills and values essential for the education of students in Western Australia. They provide a structure for defining learning outcomes, for providing breadth and balance in students' education and for ensuring attention is given to specific disciplines.

The learning areas are consistent with those endorsed by the Australian Education Council as the basis for curriculum development in Australian schools and which almost all Australian States and Territories use. Adoption of these eight learning areas for the Curriculum Framework is in the interests of students who move between jurisdictions and reflects a spirit of cooperation among educators from all Australian States and Territories.



## Principles of the Curriculum Framework

The Curriculum Framework for Western Australian schools is underpinned by seven key principles. These principles guide schools in whole-school planning and curriculum development.

#### 1. An encompassing view of curriculum

Curriculum is much more than a syllabus. A syllabus normally outlines the content to be taught. Curriculum on the other hand is dynamic and includes all the learning experiences provided for the student. It encompasses the learning environment, teaching methods, the resources provided for learning, the systems of assessment, the school ethos and the ways in which students and staff behave towards one another. All of these provide experiences from which students learn. Together, they add meaning, purpose and enjoyment to students' lives. Particular attention is required to ensure that there is congruence between the various dimensions of curriculum.

#### 2. An explicit acknowledgment of core values

People's values influence their behaviour and give meaning and purpose to their lives. While there is a range of value positions in our pluralistic society, there is also a core of shared values. The Curriculum Framework is underpinned by these shared values, which can be summarised as follows:

- a commitment to the pursuit of knowledge and achievement of potential, resulting
  in a disposition towards striving to understand the world and how best one can
  make a contribution to it, and the pursuit of excellence in all fields of experience
  and endeavour;
- self acceptance and respect of self, resulting in attitudes and actions which develop each person's unique potential – physical, emotional, aesthetic, spiritual, intellectual, moral and social;
- respect and concern for others and their rights, resulting in sensitivity to and concern for the well-being of others, respect for others and a search for constructive ways of managing conflict;
- social and civic responsibility, resulting in a commitment to exploring and
  promoting the common good; meeting individual needs in ways which do not
  infringe the rights of others; participating in democratic processes; social justice
  and cultural diversity; and
- environmental responsibility, resulting in a respect and concern for the natural and cultural environments and a commitment to regenerative and sustainable resource use.

These values which are listed in full on the inside back cover of the document, are woven through all aspects of the Framework.



#### 3. Inclusivity

The Curriculum Framework is intended for all students in Western Australian schools. Inclusivity means providing all groups of students, irrespective of educational setting, with access to a wide and empowering range of knowledge, skills and values. It means recognising and accommodating the different starting points, learning rates and previous experiences of individual students or groups of students. It means valuing and including the understandings and knowledge of all groups. It means providing opportunities for students to evaluate how concepts and constructions such as culture, disability, race, class and gender are shaped.

#### 4. Flexibility

The curriculum must be adaptable to the particular needs of different schools and communities. It must also be responsive to social and technological change and meet students' needs arising from that change process. In particular, it must encourage effective use of new technologies as tools for learning. The Framework provides a balance between what is common to the education of all students and the kind of flexibility and openness required for education in the twenty-first century.

#### 5. Integration, breadth and balance

Effective education enables students to make connections between ideas, people and things, and to relate local, national and global events and phenomena. It encourages students to see various forms of knowledge as related and forming part of a larger whole. While opportunities to specialise must be provided to allow for specific talents and interests, all students need a broad grasp of the various fields of knowledge and endeavour. They also need experience in building patterns of interconnectedness which help them to make sense of their own lives and of the world.

#### 6. A developmental approach

Students develop and learn at different rates and in different ways, constructing new knowledge and understandings in ways which link their learning to their previous experiences. The developmental approach of the Curriculum Framework accommodates these needs. At the same time, it provides students and their parents with a clear sense of the direction of students' learning, and through appropriate assessment and reporting procedures, of how students are progressing.

#### 7. Collaboration and partnerships

Education is the shared responsibility of students, teachers, parents, tertiary educators and the community. Successful implementation of the Framework requires a collaborative approach to planning by all concerned and collective responsibility for students' achievement of the intended outcomes.



#### Overarching Learning Outcomes

- 1. Students use language to understand, develop and communicate ideas and information and interact with others.
- 2. Students select, integrate and apply numerical and spatial concepts and techniques.

- 3. Students recognise when and what information is needed, locate and obtain it from a range of sources and evaluate, use and share it with others.
- **4.** Students select, use and adapt technologies.
- **5.** Students describe and reason about patterns, structures and relationships in order to understand, interpret, justify and make predictions.
- **6.** Students visualise consequences, think laterally, recognise opportunity and potential and are prepared to test options.
- 7. Students understand and appreciate the physical, biological and technological world and have the knowledge and skills to make decisions in relation to it.





- 8. Students understand their cultural, geographic and historical contexts and have the knowledge, skills and values necessary for active participation in life in Australia.
- 9. Students interact with people and cultures other than their own and are equipped to contribute to the global community.

- 10. Students participate in creative activity of their own and understand and engage with the artistic, cultural and intellectual work of others.
- 11. Students value and implement practices that promote personal growth and well being.
- 12. Students are self-motivated and confident in their approach to learning and are able to work individually and collaboratively.

13. Students recognise that everyone has the right to feel valued and be safe, and, in this regard, understand their rights and obligations and behave responsibly.



### Overarching Learning Outcomes

The development of knowledge, skills and values is a lifelong process, and occurs in many places besides school. This section of the Overarching Statement describes the outcomes which all students need to attain in order to become lifelong learners, achieve their potential in their personal and working lives and play an active part in civic and economic life. These outcomes apply across all learning areas and are the responsibility of all teachers. The outcomes for each learning area contribute to the achievement of the Overarching learning outcomes, and each learning area statement includes a description of the links between the learning area outcomes and the overarching learning outcomes.

The statement of each outcome is accompanied by a more detailed description of that outcome. Each description includes a number of examples of the ways in which students might demonstrate progress towards the outcome at different stages in their schooling from kindergarten to year 12.



I Students use language to understand, develop and communicate ideas and information, and interact with others.

Students read, view, listen, speak and write with an awareness of and responsiveness to different cultural conventions and interpretations. They understand the ways in which language is structured and use language effectively to deal with everyday situations. Their command of language includes an ability to use Standard Australian English appropriately. This ability is built upon and in addition to their home languages and dialects. They use language as a means of learning across the curriculum and are aware of the special ways language is used in each of the learning areas. Students know the specialist vocabulary for particular disciplines, the typical text types used in a subject area and the conventions of these text types. They understand and use visual images and symbolic forms, such as numbers, musical notation, diagrams, graphs and tabular information: for example, students may ask directions from someone; contribute appropriately to a discussion; describe an experience using Auslan (sign language); explain a mathematics operation to another student; prepare a chart which explains a scientific phenomenon; write a set of directions for using a machine; write a letter requesting information from an organisation; explain why people vary their language in different social situations; critically analyse the language in a newspaper article; or present the findings of a project on the Internet and call for comment.



Students select, integrate and apply numerical and spatial concepts and techniques.

Students deal easily with everyday situations which require the use of quantitative and spatial concepts and skills. These may involve such tasks as mentally calculating the discount for a sale item, reading an article on best buys for computers, adjusting and measuring the ingredients for a recipe, making and laying out a shirt pattern, interpreting a scale drawing or weather map, or calculating the likelihood of success in a game. In doing so, they ask and answer questions about such things as the cheapest, best, biggest, quickest or most likely. Students also draw on their quantitative and spatial knowledge to understand new information and situations, solve problems not previously encountered, and judge the reasonableness of particular uses of mathematics: for example, they may use their knowledge to assist them to plan a new garden bed; choreograph a dance; calculate the travelling time to a destination; understand a new economics concept; design an unusual cupboard; work out how to calculate monetary exchange rates for the first time; or question a claim in the media about the costs and benefits of higher education.



Students recognise when and what information is needed, locate and obtain it from a range of sources and evaluate, use and share it with others.

Students frame and clarify questions, collect information, organise it and represent it in ways suited both to the type of information and to their purposes. They analyse and interpret information, judge its quality and decide what conclusions or inferences might reasonably be drawn, taking into account the element of chance involved in its collection: for example, students may find out a fact about an animal; search the Internet for information on the effect of a recent volcanic eruption on weather patterns; integrate information from several brochures to plan a trip; reorganise data about favourite foods to answer new questions; investigate immunisation practices in Australia and prepare a poster to communicate conclusions to peers; produce statistics and graphs to compare responses of students and parents to a survey on the age of transition to secondary school; review the evidence in a foreign newspaper article on the impact of industry on the environment; or use the Internet to work with and share information with students in other schools.



#### 4 Students select, use and adapt technologies.



Students have the motivation and confidence to develop and use technological solutions to meet needs. They apply or operate a specific technology and choose between or integrate various technologies for a purpose. They adapt familiar or existing technologies to meet the demands of new tasks or situations. As confident and capable users of a wide range of technological applications and processes, they critically appreciate the consequences of technological innovation. They have the skills to acquire and evaluate information in order to take ethical advantage of technological change: for example, students may use a concept computer keyboard; word-process a document; design and make a stage lighting system; make an ethical judgement about the school's choice of using scheme or bore water; use a computer package to understand a science idea; make a skateboard ramp; produce a multimedia presentation; or use a range of communication technologies to establish relationships with others outside the school.

5 Students describe and reason about patterns, structures and relationships in order to understand, interpret, justify and make predictions.

One of the main ways in which we make sense of the world is by observing similarities and connections between objects and events and making generalisations about them. Students recognise, describe, explain and project patterns in a wide range of phenomena. They also classify things, recognising, developing and using structures and forms. They reason logically about these regularities, making predictions and drawing conclusions: for example, the patterns and structures they explain and use may include spelling rules and their exceptions; the relationship between seasonal vegetation and survival in the outback; classifications of food types; metrical form in poetry and rhythms in music; a network representing kinship; the effect of doubling linear dimensions on the surface area and volume of things; the relationship between exercise, diet and health; or the relationship between molecular structure and the properties of substances.



Students visualise consequences, think laterally, recognise opportunity and potential and are prepared to test options.

In approaching issues and problems, students think laterally, offer possibilities, explore and evaluate new ideas, and generate a range of positions and solutions. They are often stimulated by curiosity and see opportunity and potential in developing and extending ideas, including those based on intuition, insight or speculation. They investigate alternatives, visualise consequences and implications and are willing to change direction when necessary: for example, students may apply their language knowledge in unfamiliar contexts; collaborate to solve a mathematical problem in an unorthodox way; identify alternative solutions to a local environmental problem; visualise their future beyond school and explore work opportunities; experiment with the ingredients in a recipe; or develop and market their own products, such as novelties for festivals or celebrations.



Students understand and appreciate the physical, biological and technological world and have the knowledge and skills and values to make decisions in relation to it.

Students have the confidence, knowledge and skills to satisfy questions about the workings of the physical, biological and technological world and recognise that cultural preconceptions influence their understanding. They are able and willing to participate in community debate and decision making and can make informed decisions about sustainable development and its impact on people and the environment. They show concern for the environment, understand the consequences of choices in using natural resources and the environment, and have the knowledge and skills to look after both. Students understand that the connection of Aboriginal people to the environment is profoundly significant to their identity and well-being. They devise solutions to problems arising from their own needs and have methods for testing the validity of their observations and assumptions in relation to the natural and built worlds: for example, students may pose questions about the habitat of an animal; experiment with mixing colours to find out what happens with various combinations; investigate the causes of water salinity; recognise the consequence of reducing wetlands in the urban environment; investigate housing designs which minimise energy use; or use landscapes for inspiration in the arts.



Students understand their cultural, geographic and historical contexts and have the knowledge, skills and values necessary for active participation in life in Australia.



Students use historical, geographical, political, sociological and economic knowledge to analyse and understand local, national and international events. They participate actively and responsibly in democratic processes within the school and wider community. They understand and value the cultural experiences and contributions of Aboriginal people. They understand and value differing world views and perspectives and the contributions that various cultural and religious groups make to life in Australian: for example, students may explore the diverse cultural backgrounds of fellow students; recognise that the land has different meanings and uses for different groups; explain the different roles of State and Federal governments; recognise the impact of a technology on social relationships; research the historical experiences of Aboriginal people; describe how scientific theories influence and are influenced by world views; understand the role the arts play in societies; investigate the relationship between gender, work and income distribution; or actively participate in decision making within the school.

Students interact with people and cultures other than their own and are equipped to contribute to the global community.

Students are able to communicate effectively with people from other cultural groups and countries. They understand the relationship between language and its social and cultural contexts and the importance to all people of their own linguistic heritage. They are able to apply this knowledge to communicate effectively. They have a broad world view which sees Australia in a global context and appreciate their obligations as global citizens. They appreciate the common humanity of all people and understand the interdependence of countries in many areas, including the environmental and economic spheres: for example, students may communicate in a language other than English; use culturally appropriate behaviour when greeting people from another culture; read a literary work in the original language or in English translation; participate in cross-cultural projects; describe how economic developments in another country will affect the exchange rate of the Australian dollar; explain the reasons for global warming; experiment with painting techniques from other cultures; access media in other languages; use e-mail or video conferencing through the Internet to communicate with students in another country; or take part in a reconciliation activity.



10 Students participate in creative activity of their own and understand and engage with the artistic, cultural and intellectual work of others.

Students have a broad understanding of the contribution of cultural heritages to creative endeavours. They have the knowledge, skills and understandings to appreciate the achievements of others, particularly socially-significant achievements and creations: for example, students may appreciate a poem, a novel, a dance, sporting achievement, street theatre, a symphony, a violin, a dot painting, a quilt, the concept of zero, origami, the calculus, an invention such as the silicon chip or the development of a scientific theory. They have the confidence and capacity to produce their own creative works: for example, students may produce a painting; compose a poem; solve a design problem; write a song; role-play a story; make a sculpture from junk material; or offer an original and well-crafted explanation or argument.

Students value and implement practices that promote personal growth and well being.

Students have the knowledge and skills to make informed decisions that lead to a balanced, managed, active, enjoyable and productive lifestyle. They internalise values and implement practices that reflect the importance of all dimensions of health – social, emotional, spiritual, mental and physical – and understand the interconnectedness of these dimensions. They have the sport and physical activity skills to participate confidently and competently in play and games. They critically analyse factors in consumer society which impact on health, well-being and family relationships. They understand the effect that idealised images of the self can have on developing self-concept and individual and community health. They explore value and belief systems as a means of personal growth: for example, students may identify potential hazards in the home or workplace; design a balanced diet; plan a weekly regimen which balances physical activity, social activity and study; play a team sport with skill and confidence; discuss the influence of the media on health decisions; work to improve communication in a relationship; or explore issues of personal meaning.





Students are self-motivated and confident in their approach to learning and are able to work individually and collaboratively.



Students plan, reflect on and direct their own learning. When needed, they seek help from adults, peers, print resources and technology. They have available a range of strategies to help them get started, work through, persist with and learn from problems independently. They also recognise when collaboration will enhance their work. They work well with others and contribute in various ways, sometimes leading and sometimes following, accepting, sharing, integrating or adapting ideas from others and building on various positions flexibly and responsively: for example, students may prepare their own work plan for completing a project; cooperate in small groups to make a construction from blocks; conduct a class meeting; play in a team; undertake cycles of problem posing, conjecture and justification to investigate a mathematical situation; help produce a newsletter or play; negotiate with potential 'clients' regarding a design; work with community members on a local issue; or use the Internet to work collaboratively on a project with students in another school.

Students recognise that everyone has the right to feel valued and be safe, and, in this regard, understand their rights and obligations and behave responsibly.

Students respect the rights of others to equal access to resources and to a work and leisure environment which is non-threatening and free from harassment such as teasing, sarcasm or remarks that stereotype or denigrate others or their efforts. They understand the rights and responsibilities associated with living in a democratic society. They cooperate with their peers and try to understand those whose backgrounds, experiences or values differ from their own. They show by their actions that they recognise and appreciate differences between people. They are aware of the impact of their behaviour on others, take responsibility for their own actions, and reflect on the effects of their actions in order to learn from their experiences. They recognise a collective obligation to assist others to be respected and safe and accept that they must take some personal responsibility for their own emotional and physical safety. Students are aware of and understand the need for policies and laws which provide redress for, and sanctions against, certain forms of unacceptable behaviour: for example, students may show concern for the welfare of other students; explain the reasons for a classroom rule; share limited resources; welcome new students to the school; work cooperatively with a wide range of other students; or show respect for the feelings of others.



# SCOPE

#### The Scope of the Curriculum

This section of the Overarching Statement describes the scope of the curriculum which is consistent with the learning outcomes. Rather than prescribing curriculum content, it identifies broad learning areas, the outcomes of which contribute to the achievement of the overarching learning outcomes.

The Overarching learning outcomes can be achieved through a program of study which addresses the outcomes of eight learning areas: The Arts, English, Health and Physical Education, Languages Other Than English, Mathematics, Science, Society and Environment, and Technology and Enterprise. These areas reflect the consensus about the best way of describing curriculum and collectively represent the major areas of human knowledge and endeavour.

While eight learning areas have been identified, knowledge, skills, understandings, values and attitudes should be integrated across all learning areas. Students should be given frequent opportunities to see the connections between different areas of knowledge and endeavour. They should be encouraged to understand the contingency of any division of knowledge into learning areas, subjects or other categories, and to appreciate the interconnectedness of all knowledge and the indissoluble relationship between knowledge and values. They should see learning areas and subjects as vehicles for understanding the world in which they live. Their education should help them to see the content of their learning areas and subjects at work in their own lives and the world around them. The holistic nature of human learning and knowledge should be emphasised throughout students' schooling.

#### THE LEARNING AREAS

In The Arts students develop creative skills, critical appreciation and knowledge of artistic techniques and technologies in dance, drama, media, music, visual arts and combinations of arts forms. The Arts develop students' sense of personal and cultural identity and equips them for lifelong involvement in the appreciation of the arts.

In English, students learn about the English language and how to use it effectively. The study of English plays a vital role in the development of literacy, enhances students' learning in all areas of the curriculum and provides them with the communication skills and critical understanding of language necessary for active participation in society.

Health and Physical Education develops an understanding of health issues and the skills needed for confident participation in sport and recreational activities. It enables students to make responsible decisions about health and physical activity and to promote their own and others' health and well-being.

In Languages Other Than English, students communicate effectively in languages other than English and further develop their skills and understandings in English. They gain an understanding of other societies, the ability to interact with people and cultures other than their own, and practical skills which they can use in future social, cultural and vocational areas.



In Mathematics, students use ideas about number, space and chance, and mathematical ways of representing patterns and relationships, to describe, interpret and reason about their social and physical world. Mathematics plays a key role in the development of students' numeracy and assists learning across the curriculum.

In Science, students investigate, understand and describe the physical, biological and technological world and value the systems and processes that support life on our planet. Science helps students to become critical thinkers who use evidence to construct conclusions.

Society and Environment, develops students' understanding of how individuals and groups live together and interact with their environment. Students develop a respect for cultural heritage and a commitment to social justice, democratic process and ecological sustainability.

In Technology and Enterprise, students apply knowledge, skills and resources in the development of practical solutions to problems. Through this process they learn to be innovative, adaptable and reflective as they select and use appropriate materials, information and systems to achieve worthwhile results.

#### The learning areas and the overarching learning outcomes

All of the overarching learning outcomes are seen as the province of all learning areas: for example, while the Technology and Enterprise learning area could be considered to contribute in a major way to the outcome 'Students select, use and adapt technologies', all learning areas in some way contribute towards the achievement of this outcome.

Different learning areas contribute to the overarching learning outcomes in different ways. Each establishes outcomes specific to that area and shows how these link to the overarching learning outcomes. Schools will use the Learning Area Statements as guides to the construction of a comprehensive, broad and balanced curriculum, rather than using them to divide up the curriculum, create artificial boundaries or fragment the curriculum.

Schools should plan across the eight learning areas in ways that suit their own contexts and communities. Emphasis on particular learning area outcomes may vary according to phases of development. It might be appropriate, for example, to give greater weighting to the development of language, literacy and numeracy skills in the early childhood years. It might also more appropriate to provide for greater specialisation in the later years of schooling, to allow students to place more emphasis on preparation for post-school options.

Programs of study should be planned which enable students to work towards achieving outcomes that combine knowledge, skills and values across learning areas. This might mean, for example, that students study content through a language other than English in a bilingual education program. An integrated approach is particularly appropriate for activities that have a real-life application, such as implementing a school production. It should also be recognised that students might demonstrate achievement of outcomes through their work in non-school settings, such as workplaces.



#### PHASES OF DEVELOPMENT

This section is built around the concept of the maturing child achieving the outcomes. It focuses on the ways that learning might progress at four overlapping phases of development. While not intended to be prescriptive, it gives some guidance about the typical sorts of curriculum experiences students might need at each phase to best achieve the outcomes. It is recognised that each student is developing and achieving in different ways, at different stages and at different rates.

The Learning Area Statements build on this section in relation to the outcomes and content specific to each area.

#### **EARLY CHILDHOOD** (typically kindergarten to year 3)

Young children have a natural curiosity about their physical, social and technological world. They have a strong desire to make sense of their world and to represent and communicate their experiences and understandings through language and various arts forms. They construct and review their understandings through interaction with others, direct and vicarious experiences and the use of their senses. Young children display increasing sophistication and control over their own learning. This is evident in their rapidly-developing capacity to relate to others and to interact with their world.

It is important that learning experiences build upon each child's understandings, skills, values and experiences. Schools should foster strong relationships with families and communities, and draw upon these relationships to provide culturally-appropriate programs. Teachers take account of the young child's continuing development, both inside and outside formal schooling.

Learning and teaching programs are built around knowledge about children's development; their linguistic, social, emotional, aesthetic, spiritual, creative, physical and cognitive ways of knowing. They are purposeful and appropriate to the

child's current thinking, interests and ways of learning. Activities should encourage children's autonomy, intellectual risk taking, responsibility and control of learning. Effective teachers use a variety of strategies, including explicit approaches with wholeclass, small-group and individual encounters.

Children achieve the outcomes when their learning experiences enable them, through play and experimentation, to observe, manipulate and explore objects, materials, technologies, physical movement and other phenomena. They need frequent opportunities to make, build, design and draw for both utilitarian and creative purposes in both indoor and outdoor settings.

Children's exploration of their world includes reflection on behaviours, values, language and social practices as well as physical phenomena. They are encouraged to pose personally-meaningful questions and to seek ways of answering such questions.

Young children need to discuss, describe, label, classify, communicate and represent their observations and experiences in ways which are meaningful to them. They should have appropriate opportunities to develop their control and understanding of the symbolic representations associated with written language and mathematics. These skills help children to understand their



world and to achieve competence and personal satisfaction.

Experiences will typically integrate knowledge, understandings, skills, and values and attitudes across learning areas.

As the child moves through this phase of development, the teacher continues to rely on close observation and responds to the child's emerging intellectual and social understandings.

#### MIDDLE CHILDHOOD (typically years 3 to 7)

As children grow, their sense of themselves and their world expands. They begin to see themselves as members of larger communities. They are interested in and like to speculate on other times, places and societies. They begin to understand and appreciate different points of view, develop the ability to think in more abstract terms and undertake sustained activities for longer periods.

Students' abilities to work collaboratively and to develop their social skills should be fostered by activities which require group planning and decision making, and interaction with people inside and outside their classroom. They should be given increased responsibility for managing and organising activities, individually and in groups of varying sizes.

As in the early years, activities will typically be integrated across learning areas. An investigation into the ecosystem of a local park or bushland, for example, could provide an opportunity to achieve outcomes from a variety of learning areas.

In exploring their physical, social, cultural and technological world, students should be encouraged to pose more focused questions and to carry out investigations in which they form predictions, hypotheses or conjectures, test them and reflect on their findings. The investigation of categories and patterns in their world should become more refined and include relationships, structures, systems and processes. As in the early years, this will include exploration of behaviours, values, language and social practices as well as physical phenomena.

Increasingly students will be learning to draw on a wider range of sources of information in answering questions and consider phenomena more widely. This ability will be enhanced by introducing them to experiences beyond their immediate environment including those of people from other times, places and cultures, both directly and vicariously. These learning experiences should emphasise and lead to an appreciation of both the commonality and diversity of human experience and concerns.

Students explore a wider range of technologies and forms of communication and representation, and experiment with them to investigate the advantages of different representational forms and technologies for different materials, purposes and situations. They develop a sound grasp of written language and numeric conventions and use these in a range of different learning situations in purposeful ways to achieve outcomes across all learning areas.

Students reflect on their learning and work practices and consider ways in which these might be improved, modified or adapted for different situations.



#### EARLY ADOLESCENCE (typically years 7 to 10)

In early adolescence, students often align strongly with their peer groups and may begin to question established conventions, practices and values. Their interests extend well beyond their own communities and they begin to develop concerns about wider issues. Students' interest in the natural, social and technological world is often related to the impact on them personally and can help them in their current and future lives. They also begin to develop an interest in particular fields of knowledge or endeavour for their own sake or for the personal satisfaction they provide.

Students' growing independence and peergroup orientation is built upon by providing opportunities for them to participate in important forms of decision making within the classroom and school and to work with others. Through such experiences students assume increased responsibilities, develop decision making skills, explore values and further refine their social and collaborative work skills.

Students continue their exploration of the physical, social and technological world and gain familiarity and confidence with the methods, conceptual frameworks and languages of particular disciplines. They should begin to see these as ways of understanding the world and operating in it, by participating in real-life applications.

Their induction to specific areas of learning builds on their earlier work in investigating patterns, processes and phenomena, and exploring forms of representation and technology. They understand that particular ways of working and thinking have developed over time for particular reasons but may still be subject to debate, revision and change.

Students are encouraged to see the links between areas of learning and the interconnectedness of various fields of human endeavour. Activities or programs of study that allow them to achieve outcomes in a number of learning areas at the same time should continue to be provided. These can make a significant contribution to learning and progress towards desired outcomes.

Learning and teaching programs should assist students to develop a broader and more comprehensive understanding of the contexts of their lives and the world in which they live. They should, for example, lead to an increased understanding of the complexity of the natural environment, society and technology; an awareness of the potential and problems of increased knowledge and technology; and an understanding of the relationship between knowledge, technology and values.

While enabling students to see themselves as the recipients of particular social, intellectual, linguistic, artistic and technological heritages, teaching and learning programs should encourage an open and questioning view of them with students exploring other ways of thinking and world views and seeing themselves as active participants in their own continuing development of and that of their society and the world.

Learning experiences enable students to draw on increasingly diverse and complex sources of information that facilitate comparison, contrast, synthesis, questioning and critiquing of information.



#### LATE ADOLESCENCE/ EARLY ADULTHOOD (typically years 10 to 12)

In this phase, students have a stronger sense of their own strengths, interests and goals. They play a major role in determining the decisions that affect their lives and in shaping their learning experiences. They have a developing sense of themselves as active players who have some responsibility for the direction of community life, and are often concerned about major social and environmental issues and the ethical implications of human activity and knowledge.

Curricula and courses of study are influenced by the use of more formal assessment, such as external examinations, the need for accreditation and certification, and the post school aspirations of students. Increasingly students may achieve some of the desired learning outcomes in school, vocational education and training or in the workplace.

Many students study particular fields in greater depth than others. As well as extending students' knowledge and skills in their chosen areas in ways that meet their personal aspirations, learning programs should emphasise the ways in which different forms of knowledge, endeavour and representation are based on particular assumptions, values and world views, the nature of which is conditional, tentative or partial. Students investigate the implications for, and the applications of, knowledge and skills, focusing on ethical issues and on how changing values and social mores can affect their learning.

Learning and teaching programs provide opportunity for students to demonstrate a high level of responsibility in the management of a wide range of tasks and in the management of their own learning. Learning experiences should enable students to plan and manage complex tasks, both individually and collaboratively. Students should have the opportunity to show initiative, creativity and problem-solving skills. This will be achieved by experiences that require them to consider, test and evaluate various approaches to achieving goals or solving problems.

Experiences should be provided which continue to develop high levels of language competence, including competence within the specialised language demands of particular fields of endeavour. Students should also have experience in using language in ways that enhance their abilities to interact successfully with others in a wide range of situations, both formal and informal. Language is used for practical and aesthetic purposes and as a means of learning. Learning experiences should enable students to attain a high level of competence and confidence in the use of language for a range of complex and relatively sophisticated purposes.

Students should also have experiences which continue to develop their ability to seek, use and evaluate information for a range of complex purposes. They should be involved in tasks which require them to clarify goals and approaches in relation to the information they need, show initiative and perseverance in accessing appropriate information, compare and evaluate information and ideas from different sources, and critically select and synthesise information in ways relevant to different purposes.

In all areas emphasis is placed on understanding conceptual frameworks and methods rather than acquiring knowledge in isolation, as a means of developing transferable skills.



## Learning, Teaching & Assessment

This section describes the principles which should guide learning, teaching and assessment for students to achieve the outcomes in the Framework. The focus is on the provision of a school and classroom environment which is intellectually, socially and physically supportive of learning. These principles assist whole-school planning and individual classroom practice. It will be essential, therefore, to ensure that there is a shared understanding of them within particular school communities and a collaborative effort to implement these principles in ways appropriate to individual schools.

#### LEARNING AND TEACHING

The following principles about learning and teaching are based on what we value and our beliefs about the learning environment schools should provide and contemporary research and professional knowledge about how learning can be supported. As such, they should lead to school and classroom practices which are effective in helping students to achieve the outcomes in this Curriculum Framework.

#### Opportunity to learn

Learning experiences should enable students to observe and practise the actual processes, products, skills and values which are expected of them.

Students can only learn to do what they have the opportunity to encounter, do or see done. They should have the opportunity to engage fully with the concepts they are to develop; observe people engaged in the processes which they are to learn; and encounter examples of high-quality products of those processes, so they can see what it is they are aiming for: for example, students are more likely to understand and make sense of mathematical, scientific or social science ideas if the information and experiences they engage with are inherently meaningful rather than requiring only imitation or memorisation. They are more likely to write, perform or design well, if they see the writing, performing or designing processes modelled and encounter examples of 'good' writing, 'good' performance or 'good' design. They are more likely to learn to respect and value the views of others, if the school environment models such behaviours – from administration to staff room to classroom to school yard.

Students should have the opportunity to engage as fully as possible in the processes they are expected to learn about or through, rather than only components or analogues for them: for example, if they are to learn to be creative or to communicate in a second language, they need the opportunity to be creative and communicate in realistic (and possibly unfamiliar) settings. If they are to expected to learn to plan, investigate and make choices, then they must practise these skills, rather than simply carrying out the plans, investigations and choices of others. Where skills need to be



developed to a high level of proficiency or automatic response, appropriate practice of the actual skill is needed in settings that approximate those in which the skill is to be used.

#### Connection and challenge

Learning experiences should connect with students' existing knowledge, skills and values while extending and challenging their current ways of thinking and acting.

Learning is most likely to be successful when students are challenged to go beyond what they already know, understand or can do in order to build new knowledge, understandings and skills. Sometimes existing conceptual frameworks and capabilities can be readily extended to incorporate new learning; at other times they need to be exposed (and possibly discarded) in order for new learning to occur. Either way, learners need to be able to connect new experiences to what they already know and can do, while at the same time reconstructing what they know and can do to take account of the challenge provided by their new experience.

Effective teaching both connects with and challenges students' present knowledge, skills and values. It helps students to make explicit the way in which new knowledge or experiences is consistent or in conflict with existing understandings. It endeavours to ensure that the gap between students' existing knowledge and new ideas is sufficient to bring new challenges and are potentially within their reach.

#### Action and reflection

Learning experiences should be meaningful and encourage both action and reflection on the part of the learner.

Learning is likely to be enhanced when the learner engages actively with the task at hand. Students should be encouraged to think of learning as an active process on their part, involving a conscious intention to make sense of new ideas or experiences and improve their own knowledge and capabilities, rather than simply to reproduce or remember. This means that learning experiences should be potentially meaningful and involve students in both doing and reflecting. Students should learn to carry out relevant actions (do, imitate, plan, experiment, test, create, rehearse, make, choose, try alternatives) and reflect upon and make sense of the results of those actions (What does this mean? Why did that happen? Am I surprised by this answer? Does it make sense? How is this problem like others I have seen before? What worked? Why? How does this connect with other learning? Are these ideas related?). Language plays a major connecting role between doing and reflecting and students need to learn to use language as a tool for their own learning.

As part of the reflective process, students should be assisted to make connections between apparently unrelated ideas and experiences and different areas of knowledge. Teachers should emphasise the interconnectedness of knowledge, skills and values, both within and across different learning areas. Schools should provide an environment in which knowledge, skills and values are seen as an integrated whole and their development as a lifelong project.



#### Motivation and purpose

#### Learning experiences should be motivating and their purpose clear to the student.

Students should be provided with purposeful and relevant activities that stimulate thought, inquiry and enjoyment. They may regard such activities as purposeful and relevant if they have an immediate practical goal (I need to know what happened in the story). We need to reduce harassment at school. We need to work out how much money we have collected.) or if they relate to some longer-term goal which the student values (I need to practise my serve so my overall game will improve). Students may also engage quite happily with tasks that provide their own enjoyment and challenge: making an attractive pattern, solving an interesting problem or running a hard race. Activities should be consistent with students' maturity and should endeavour to both engage their interest and challenge them to excel. Students should be clear about what is expected of them, what they are trying to learn and why. Teachers can enhance purposeful learning by making clear the long-term outcomes expected to result from students' engagement with the learning experiences provided.

#### Inclusivity and difference

#### Learning experiences should respect and accommodate differences between learners.

Students have a variety of past experiences shaped by their language, culture, health, location, values, abilities and disabilities, and previous education. The extent to which a student can benefit from an experience will depend on the extent to which it connects and challenges that student's knowledge. Thus, teaching must be highly adaptive, acknowledging, respecting and accommodating the diverse background experiences students bring to the classroom.

Students develop at different rates and also learn new ideas more or less quickly. They should be provided with the time, conditions and encouragement they need to learn in robust ways, and discouraged from superficial learning which gives the impression of keeping pace at the expense of long-term and sustained learning. Students may differ in the extent to which they prefer to work independently or collaboratively, through pictures or words, orally or in writing, laterally or in a linear fashion, cautiously or adventurously. The same student may successfully use certain approaches in one learning situation and other approaches in a different learning situation.

Students should be provided with a rich variety of learning opportunities which enable them to build on their existing experiences and personal strengths and work in preferred ways. The experiences should, however, also broaden students' horizons by extending the range of contexts in which they can function and the learning strategies which are available to them as individuals. The use of the Internet as a tool for learning and teaching is critical in this regard.



#### Independence and collaboration

Learning experiences should encourage students to learn both independently and from and with others.

If students are to become autonomous learners, they need to regularly experience opportunities for both individual and collaborative learning. Working individually is necessary and can help to ensure a personal grasp of concepts, processes and skills. Working with peers enables students to be challenged by the views of others, clarify ideas and interpret and use appropriate language. Often discussion will involve students in explaining ideas to others and, in doing so, clarifying these ideas for themselves.

Learning experiences should be structured so that students can learn not only from their immediate peers and teachers but also from family and community members and people from other parts of the world, who are now more readily accessible through various forms of technology. This will help them to appreciate that all people can contribute to learning and that life experiences are to be valued, together with books and other sources of information. It will also enable them to see things from different perspectives, to stand outside their own culture and their own society, to value and respect diversity, and to be critical and analytical of different points of view.

Teachers should plan learning experiences which enable students, whether working individually or in groups, to become increasingly autonomous. Students should be assisted to reflect on their own learning, thinking about how they learn and the conditions which help them to learn. Classroom processes should give students some flexibility in choosing ways of working and encourage them to take responsibility for their own learning.

#### Supportive environment

The school and classroom setting should be safe and conducive to effective learning.

A supportive learning environment provides the intellectual, social and physical conditions in which effective learning can occur. School and classroom policies and practices should be designed to foster in students the knowledge that they can be successful autonomous learners and support the development of a confident approach to learning and a desire to achieve well. This means, for example, that students should feel challenged and able to take sensible risks in their learning in the knowledge that the errors which may result will be regarded a necessary, acceptable and often helpful part of learning.

Furthermore, the school and classroom should provide a cooperative atmosphere, free from harassment such as teasing, sarcasm or remarks that stereotype or denigrate students or their efforts. Difference and diversity should be respected and sensitivity shown to matters of gender, cultural difference, social class, ability and disability, family circumstance and individual difference. A supportive learning environment also provides sufficient, fair, safe and ethical access to a suitable and varied range of resources, including space and equipment, print and other materials and useful technology. This does not imply the same environment for all. Indeed, special provision may often be necessary to ensure that all students are given the opportunity to achieve intended outcomes.



### **ASSESSMENT**

A primary purpose of assessment is to enhance learning. Another purpose is to enable the reporting of students' achievement. Assessment practices have a powerful impact on learning and teaching. Issues such as what evidence to collect, how to collect it and how to interpret it need to be addressed and debated widely within the school community. Developing a shared understanding of the outcomes enhances the validity and consistency of judgements about students' learning. In turn, this improves learning and teaching by improving the quality of information upon which teachers and students act. Teachers are also then able to report more credibly to other teachers, parents and the wider community.

Whether at the level of the classroom, school or system, assessment information should enable judgements to be made about students' progress towards the desired outcomes in a way that is fair and contributes to continued learning. Thus, assessment information should enable teachers and students to know what students can do assisted and what they can do unassisted and what they can do when working in groups and when working alone. It should enable them to distinguish between work that is original and non-routine and work that is reproductive or memorised. Fair assessment is based on criteria which are valid and transparent and applied with consistency and without discrimination. These in turn require an assessment regime based upon multiple kinds and sources of evidence. Assessment is likely to enhance learning when the criteria are valid and explicit and when the assessment activities are themselves educative.

#### Valid

Assessment should provide valid information on the actual ideas, processes, products and values expected of students.

Students and teachers tend to focus their efforts on those things which are assessed because those are the things in which changes are noticed and which are seen to be valued. Hence the 'opportunity to learn' principle for learning and teaching requires that assessment processes address with integrity the full extent and range of the outcomes.

Summative judgements about students' achievement on an outcome should be based on assessment information about the outcome in its fullest sense, rather than only on some parts of it, a proxy for it or a rote manifestation of it. This does not mean that every assessment task must encompass the full outcome or even provide direct information on students' achievement of the outcome. Assessing students' knowledge of particular facts, concepts or skills which underpin an outcome but are not specifically described by the outcome may be important in a formative way by enabling teachers to anticipate whether students will be able to achieve the outcome and what additional experiences are needed, or to diagnose why a student is having difficulty in achieving the outcome. While assessments on such underlying facts, concepts or skills may form part of the decision about achievement of an outcome, they should not be used as a replacement for assessing the actual achievement of an outcome. Judgements should be based on information that fully encompasses the outcome and includes situations that authentically represent the ways in which the outcome will need to be used in the future.



#### Educative

#### Assessment should make a positive contribution to student learning.

Assessment practices should be educationally sound and contribute to the achievement of the learning outcomes. Assessment may do this in a number of ways: firstly, assessment activities should be educationally valuable in themselves and, as far as possible, form an integral part of the learning process rather than a separate process at the end; secondly, assessment should provide useful feedback which assists students in future learning, perhaps by enabling them to recognise inconsistencies in their thinking, flaws in their production or gaps in their knowledge; thirdly, assessment practices should be designed so that they do not inhibit risk taking or encourage short-term and unproductive learning strategies: rather, they should encourage in-depth and long-term learning; and fourthly, assessment practices should foster self-directed learning by enabling students to assume responsibility for their own assessment. They should be encouraged to discuss their progress with teachers and engage in peer and self assessment in order to monitor and reflect on their own learning.

## Explicit

Assessment criteria should be explicit so that the basis for judgements is clear and public.

Students have both the need and the right to know the criteria by which they are being assessed. This is a matter of fairness and a powerful means of enhancing their learning. Explicit criteria contribute to students' learning by making clear the outcomes or goals they are striving for, providing them with useful feedback on their progress, encouraging them to reflect on their learning and suggesting directions for future learning.

Clear and public criteria also support the enhancement of professional judgements about student learning by ensuring that decisions are open to scrutiny and challenge and are consistent from teacher to teacher and situation to situation. Explicit assessment criteria also enable clear statements about individual students' progress to be made to students, parents or caregivers, other schools, post-school institutions and employers. In addition, they allow clear evidence to be provided to the community about the outcomes of schooling.

#### Fair

Assessment should be demonstrably fair to all students and not discriminate on grounds that are irrelevant to the achievement of the outcome.

Fairness to students means that they should have equal opportunities to demonstrate their achievement of outcomes. This does not imply that they should all be assessed on the same tasks: indeed, achievement of an outcome might be shown in quite varied ways. Fair assessment often means assessing the one outcome in different ways related to the characteristics and circumstances of the students. These may include their gender, ethnicity, language, race, socioeconomic circumstances or geographic location, and their individual personalities, talents and disabilities. What are familiar or helpful contexts for some students will be unfamiliar or unhelpful to others.



Assessment should be sensitive and responsive to such differences among students, so that they are not inadvertently placed in a better or worse position to demonstrate their achievement of an outcome. This does not mean diluting or modifying the outcomes themselves: there is nothing inclusive about apparently succeeding but not learning much. While fair assessment does not demand that all students be assessed on the same tasks, judgements about their learning and achievements should clearly reflect the same outcomes to the same standards.

# Comprehensive

Judgements on student progress should be based on multiple kinds and sources of evidence.

Information collected for assessment should provide a reliable indication of whether students can do the things described in the outcomes consistently and autonomously over a range of circumstances. If judgements of student achievement are to be consistent and fair, they need to be based on the integration of a range of kinds and sources of evidence collected in various situations over a period of time. Sometimes various types of task and sources of evidence will be necessary in order to provide complementary information about different aspects of the same outcome. At other times, they will provide alternative information on the same aspect of an outcome.

Thus, information about an outcome should be collected repeatedly over time and based on a variety of kinds of tasks – perhaps a combination of closed and open tasks, short and extended tasks, written and oral reports, models, displays, performances, teacher interviews, and the observation of student work.

It should also draw on different sources of information, such as teachers' anecdotal records, work samples, portfolios, student self-evaluations, students' written or visual journals, peer assessment, checklists, teacher-made tests, standardised tests, audiotapes, videotapes, interviews and testimonials from members of the community.





# Links Across the Curriculum

This section of the Overarching Statement is intended to show teachers and administrators how to make connections that take into account the holistic nature of the curriculum and provide students with learning opportunities which integrate similar knowledge, skills and values across learning areas.

The outcomes in the Learning Area Statements individually and collectively contribute to the learning outcomes in the Overarching Statement. How they do this is shown in the *Links Across the Curriculum* section of each Statement.

The table which follows provides an overview of the links between learning area outcomes and the Overarching outcomes. Significant direct and indirect links have been identified. Teachers and students will make many other connections through flexible approaches to learning and teaching.

# Examples of how the links have been made in the table

The first example illustrates how direct links have been made where specific outcome/s from a Learning Area Statement are named. In these instances, achievement of the learning area outcome will be fundamental to the achievement of the specified outcome from the Overarching Statement: that is, the knowledge, understandings, skills, attitudes and values described in the learning area outcome are the same as (or a sub-set of) those in the Overarching Statement outcome:

	OVERARCHING STATEMENT	SOCIETY AND ENVIRONMENT LEARNING AREA STATEMENT
3.	Students recognise when and what information is needed, locate and obtain it from a range of sources and evaluate, use and share it with others.	Direct 1 Indirect 2 to 7  The integrated inquiry approach central to investigation, communication and participation involves creating propositions, collecting relevant and viable information, and communicating and using it for decision-making.

The second example illustrates an instance in which the links are indirect. This means that one or more of the outcomes in the Learning Area Statement would make a contribution to the achievement of the Overarching learning outcomes if learning opportunities were to be provided and assessments of student achievement were to be made with that Overarching outcome in mind. Very often, the knowledge, understandings, skills, values and attitudes described in the Overarching outcomes are used and reinforced in the achievement of particular learning area outcomes:

	OVERARCHING STATEMENT	SCIENCE LEARNING AREA STATEMENT
9.	Students interact with people and cultures other than their own and are equipped to contribute to the global community.	Indirect 1, 2, 5, 6, 7  An awareness that science is a collective global endeavour can lead to greater appreciation of cultural diversity and an enhanced capacity to contribute to the global community.

All of the links identified in the table will be useful for teachers to consider in planning holistic learning and teaching experiences. It may be appropriate to consider only direct links if this table is being used for whole-school monitoring purposes.



Links between the Overarching Statement learning outcomes and the learning outcomes in each of the Learning Area Statements

OVERARCHING STATEMENT LEARNING OUTCOMES	THE ARTS	ENGLISH	HEALTH & PHYSICAL EDUCATION
Students use language to understand, develop and communicate ideas and information and to interact with others.	Direct 1, 3 Indirect 2, 4 The use of arts language is central to the process of developing, responding to and critically evaluating arts works.	Direct 1 to 9 The use of language underpins the development of the conventions of Standard Australian English, understanding of context and the application of language modes.	Direct 1, 2, 5 Indirect 3 Communicating knowledge and understanding of health and physical activity concepts and justifying health decisions involve the use of language.
2. Students select, integrate and apply numerical and spatial concepts and techniques.	Direct 2 Number and space are used in arts skills and processes such as choreographing, planning and building sets, counting beats and preparing glazes or dyes.	Indirect 4, 7, 8, 9 The collection, comprehension and presentation of information or ideas includes numerical, graphic and visual forms.	Direct 1, 3 Indirect 4 Numerical and spatial concepts and techniques are applied to health-related monitoring and statistics and in games, physical activity and movement skills.
3. Students recognise when and what information is needed, locate and obtain it from a range of sources and evaluate, use and share it with others.	Indirect 1 to 3 Direct 4 Use of information is integral to the formulation of arts ideas, the development of skills and processes, responses and understanding of the role of the arts in society.	Direct 4 Indirect 1, 2, 3, 5 to 9 The processes and strategies developed encompass the clarification of information needs and the location, critical evaluation, synthesising and communication of information.	Indirect 1, 2, 4 The collection and use of information is central to the development of knowledge, understandings, attitudes and values and underpins students' selfmanagement skills.
4 Students select, use and adapt technologies.	Direct 2 Indirect 1, 3, 4 Through arts skills and processes, traditional and emerging technologies are used and adapted to create, interpret, explore, develop, generate and communicate the arts.	Indirect 4 to 9 A range of technologies is selected and used to access and produce a variety of texts.	Direct 3 Information about health and physical activities is selected using a range of technologies. Specialised equipment is also used; for example, to produce nutritious meals and in leisure and recreational pursuits.

All of the links identified in this table will be useful for teachers to consider in planning holistic learning and teaching and experiences.

LOTE	MATHEMATICS	SCIENCE	SOCIETY & ENVIRONMENT	TECHNOLOGY & ENTERPRISE
Direct 4, 5 Indirect 1, 2, 3 In developing an understanding of the system of the target language, students further develop an understanding of the structure of Standard Australian English.	Direct 3, 4, 5 Using the language of mathematics involves reading, writing, listening and talking while developing an understanding of mathematical symbols and vocabulary.	Direct 1, 2 Indirect 3 to 9 Communicating scientifically involves communicating scientific understanding using technical language.	Direct 1, 4 Indirect 2, 3, 5, 6, 7 The processes of investigation communication and participation use and develop a range of communication methods.	Direct 1 Indirect 2 to 7 The use of language to communicate and negotiate about ideas and solutions is an integral part of the technology process.
Indirect 1, 4, 5 Numerical and spatial concepts can be interpreted and applied through the system of the target language.	Direct 1, 4, 6 to 11, 15, 16, 18, 19 Indirect 2, 3, 5 Working mathematically, number, measurement, chance and data, space, and algebra outcomes enable students to select, integrate and apply numerical and spatial concepts and techniques.	Direct 1, 2, 3, 6 to 9 Indirect 4, 5 Working scientifically involves processes such as measurement, modelling and quantification, and the development of science concepts requires the application of numerical and spatial concepts.	Direct 1 Indirect 2 to 7 Numerical and spatial concepts are applied in explaining social and environmental phenomena. Statistical data, graphing and mapping techniques are selected and used to represent, analyse and evaluate information.	Direct 1 to 6 The technology process requires the selection and application of concepts and techniques such as measuring, calculating and estimating.
Indirect 1, 2, 4 Use of information is integral to accessing a range of sources, understanding the culture and responding in the target language	Direct 4, 5, 13, 14 Through working mathematically and chance and data, the skills and processes are developed to frame questions; gather analyse and interpret data and represent them.	Direct 1 to 3, 5 Indirect 4, 6 to 9 Generation, use and communication of information is integral to the process of working scientifically and underpins all conceptual understandings in the learning area.	Direct 1 Indirect 2 to 7 The integrated inquiry approach central to investigation, communication & participation involves creating propositions, collecting relevant and viable information, & communicating & using it for decision-making.	Direct 1, 3 Indirect 2, 4, 5, 7 The skills of investigation and evaluation are developed through the technology process. Information handling is central to the selection, organisation and transmission of information.
Indirect 1, 2, 3, 6 Technology is selected and used to listen to, read, view and write in the target language.	Direct 4, 8, 9, 10, 13, 14 Indirect 17, 18, 19 The selection and use of a range of technologies is integral to working mathematically, number, measurement, chance & data & algebra. Outcome 13 also develops ethical understandings of the impact of technologies used in data collection.	Direct 1, 2 Indirect 6 to 9 When working scientifically, technologies are used and adapted to gather information, conduct activities and communicate results.	Direct 1, 4 Indirect 2, 3, 5, 6 The selection, use and adaptation of a range of technologies is central to collecting data and communicating findings and the consequences of ethical implications of innovations is understood.	Direct 1 to 7 The technology process focuses on the selection, use, development and adaptation of a range of technologies to meet needs and realise opportunities.

Links between the Overarching Statement learning outcomes and the learning outcomes in each of the Learning Area Statements

OVERARCHING STATEMENT LEARNING OUTCOMES	THE ARTS	ENGLISH	HEALTH & PHYSICAL EDUCATION
5. Students describe and reason about patterns, structures and relationships in order to understand, interpret, justify and make patterns.	Direct 2, 3 Indirect 1, 4 Critical processes are used to analyse similarities and differences, make patterns and draw conclusions thus responding to patterns, structures and relationships.	Indirect 1 to 9 Patterns, structures and language conventions are recognised, appreciated and used with understanding and critical awareness.	Indirect 1 to 5 Patterns and connections between knowledge and understandings, attitudes and values, and skills are developed to enable students to lead healthy, active lifestyles.
Students visualise consequences, think laterally, recognise opportunity and potential and are prepared to test options.	Direct 1, 2, 3 Exploration and development of arts ideas use many different starting points. Ideas are visualised and interpreted through an active process of lateral thinking.	Direct 4 to 9 Indirect 2 Through a range of processes and strategies, students develop the ability to be reflective and experimental in their use of language.	Direct 2, 3, 4 Indirect 1 Visualisation and predictions about future health lead to the selection of courses of action, which are tested and modified as required.
7. Students understand and appreciate the physical, biological and technological world and have the knowledge and skills and values to make decisions in relation to it.	Indirect 1, 2, 3 Understanding of aspects of the physical, biological and technological world is enhanced through arts skills and processes.	Indirect 5 to 9 An understanding of language and the ability to use it effectively empower students to understand their world and make decisions in relation to it.	Direct 1 Indirect 2 Decisions about a healthy, active lifestyle are informed by knowledge, understandings, attitudes and values related to the physical and biological world.
8. Students understand their cultural, geographic and historical contexts and have the knowledge, skills and values necessary for active participation in life in Australia.	Direct 4 Indirect 3 Recognition and understanding of the diversity of cultures, particularly within Australian art, is developed through arts, responses and examination of the role of arts in society.	Direct 1, 2 Indirect 3 to 9 An understanding that language is influenced by both situation and sociocultural contexts assists students to develop and communicate values and to the participate in debate and decision making.	Indirect 1, 2, 3 Understanding of the various social, cultural, environmental and political contexts provides perspectives that contribute to healthy, active participation in life in Australia.

All of the links identified in this table will be useful for teachers to consider in planning holistic learning and teaching and experiences.

LOTE	MATHEMATICS	SCIENCE	SOCIETY & ENVIRONMENT	TECHNOLOGY & ENTERPRISE
Direct 4, 5 Indirect 1, 2, 3, 6 Understanding of the system of the target language enables the recognition of patterns and rules of language use and the application of this knowledge to create spoken, written and visual texts.	Direct 1 to 19 Through working mathematically and using space, number, algebra and chance and data understandings, generalisations, predictions, transformations, interpretations and identifications of mathematical patterns are developed.	Direct 1, 3 to 9 Indirect 2 Through working scientifically, patterns, structures and relationships are investigated, identified and described in the formulation of theories and development of concepts.	Direct 1, 2, 3, 6, 7 Indirect 4, 5 Social and environmental contexts are used to reason about the relationships between structures, processes and systems and how these may change over time.	Direct 1 to 6 Indirect 7 Identification and investigation of patterns, structures and relationships are fundamental to implementation of the technology process and the use, modification and development of systems.
Indirect 3 to 6 Contextual clues are used to predict meaning. Individuals' thoughts and ideas are expressed in a context that supports critical thinking, problem solving and decision making.	Direct 1, 3, 4, 5, 15 Indirect 6 to 14, 16 to 19 Through appreciating mathematics and working mathematically the attitudes, appreciations and work habits developed support critical and creative thinking. Different conjectures are investigated and alternatives are tested.	Direct 1, 2, 3 Indirect 5 to 9 Through working scientifically, ideas are explored and lateral thinking is applied as predictions are made and further investigations and actions are proposed.	Direct 1, 2, 3, 7 Through investigation, communication, participation and active citizenship, abilities to reflect on experiences, critically analyse, predict answers and develop strategies are developed.	Direct 1, 5, 7 Indirect 2, 3, 4, 6 Through the technology process, problems are identified and ideas and designs are created and initiated. Models or prototypes are made, evaluated and changed.
Indirect 4 Understandings of the physical, biological and technological circumstances of target language communities are enhanced by learning in target languages.	Indirect 3, 4, 5 By contributing to students' numeracy, mathematics provides important tools for the development of understandings of the physical, biological and technological world.	Direct 1 to 9 Understanding and appreciation of the earth and beyond, energy and change, life and living and natural and processed materials are enhanced through working scientifically.	Direct 1 to 4, 6, 7 Indirect 5 Decisions are made as a result of understandings developed through inquiry into the elements of and interplay between time, place, space, resources and natural systems.	Direct 1 to 4 Indirect 5, 7 Understanding and appreciating the technological world and employing skills and understandings to make decisions about the development and use of technologies is fundamental to the technology process.
Direct 4 Indirect 5 Understandings of and abilities to interact with members of target language communities are enhanced through learning about the cultural, geographic and historical contexts of people using target languages.	Direct 1, 2 Through valuing and applying mathematics, students understand their cultural, geographic and historical contexts and have the knowledge, skills and values necessary in their society.	Direct 5, 6 Indirect 1, 2, 3, 7, 8, 9 Understandings about the physical structures of the earth and knowledge and values developed through investigation of science in society enhance the capacity to participate in life in Australia.	Direct 1 to 7 Understandings needed for active participation are enhanced by investigation of all elements of the Australian society and environment and how they have changed and developed over time.	Indirect 1 to 5, 7 Understandings of cultural, geographical and historical contexts are applied when using the technology process to develop solutions.

Links between the Overarching Statement learning outcomes and the learning outcomes in each of the Learning Area Statements

OVERARCHING STATEMENT LEARNING OUTCOMES	THE ARTS	ENGLISH	HEALTH & PHYSICAL EDUCATION
Students interact with people and cultures other than their own and are equipped to contribute to the global community.	Direct 4 Indirect 2, 3 Arts responses and an understanding of arts in society enhance the recognition and valuing of the diversity of cultures and the contribution of the arts to the world.	Direct 1, 2 Indirect 3 to 9 The application of communication skills and understanding of language and how it works enhances students' ability to communicate effectively with people and cultures other than their own.	Indirect 1, 2, 5 Through an appreciation of the sporting achievements of other countries and the contribution other cultures have made to dietary habits, students develop a broader world view.
Students participate in creative activity of their own and understand and engage with the artistic, cultural and intellectual work of others.	Direct 1 to 4 Through participation in the development of arts ideas, students develop skills and processes and use their understanding of the arts in society to create, respond to and reflect on their own arts works and that of others.	Direct 5 to 9 Indirect 1, 2 Through experiencing and studying a wide range of texts, students appreciate the cultural and intellectual work of others and engage in their own creative uses of language.	Indirect 1, 3, 4, 5 Through participation in physical activity, students are able to engage with the artistic and cultural works of others.
11. Students value and implement practices that promote personal growth and well being.	Direct 3 Indirect 1, 2, 4 Creative expression enables students to understand their development and changes in their lives and to safely explore ideas that may be frightening or damaging through the symbolic represent- ation of experience.	Direct 2 Indirect 5 to 9 An understanding of language and the ability to use it effectively enable students to critically analyse messages related to idealised images of self.	Direct 1 to 5 Through acquisition of knowledge, understandings, physical activity, self-management and interpersonal skills, students value and implement practices that reflect personal growth and well-being.
12. Students are self-motivated and confident in their approach to learning and are able to work individually and collaboratively.	Policies and initiatives at the school level based on principles of learning and teaching described in the Overarching Statement and each Learning Area Statement will allow students to develop the appropriate knowledge, skills, attitudes and values that will assist them to be self-motivated and		
13. Students recognise that everyone has the right to feel valued and be safe, and, in this regard, understand their rights and obligations and behave responsibly.	democratic aims of school	nt the school level should soling in Australian society. Ities to examine and act or	. Students should be

All of the links identified in this table will be useful for teachers to consider in planning holistic learning and teaching and experiences.

LOTE	MATHEMATICS	SCIENCE	SOCIETY & ENVIRONMENT	TECHNOLOGY & ENTERPRISE
Direct 1 to 6 By learning in target languages, related cultural understandings are developed that enable students to interact with people and cultures other than their own.	Indirect 2 Mathematics has its origins in many cultures and can enhance understanding of the world and participation in the global community.	Indirect 1, 2, 5, 6, 9 An awareness that science is a collective global endeavour can lead to greater appreciation of cultural diversity and an enhanced capacity to contribute to the global community.	Direct 4, 7 Indirect 1, 5 An awareness of the social and cultural perspectives of others are developed through investigation, communication and participation, culture and active citizenship.	Indirect 1, 3, 6, 7 Through examination of the role of technology in society and application of technology processes students can contribute to the global community through the development of solutions.
Indirect 2, 3, 4 Learning in target languages better equips students to appreciate the creative and artistic expressions of target language cultures.	Indirect 2, 5 There is an appreciation that mathematics is developed by people of all cultures and a respect for its origins in human intuition, creativity and reason. Creative engagement can occur through all aspects of mathematics.	Direct 1, 5 Indirect 2, 3, 4, 6 to 9 An appreciation of the work of important and influential scientists is developed as students work scientifically, building on the creative intellectual work of others to enhance their explanations.	Direct 1 Indirect 2 to 7 Through investigation, communication and participation original and well-crafted explanations and arguments can be developed that show an appreciation of the intellectual and cultural achievements of others.	Direct 1, 5 Indirect 2, 3, 4, 7 Development of solutions requires creativity and engagement with the intellectual work of others.
Indirect 4 Development of knowledge of target language communities provides opportunities to extend understandings of the different dimensions of personal growth and well-being in a more global sense.	Indirect 1 to 19 The application of mathematical skills and understandings contributes to an understanding of and an ability to implement practices that promote growth and well-being.	Direct 8 Indirect 3, 4 Through working scientifically, students develop understandings of their own biology that contribute to their personal growth and well-being.	Direct 7 Indirect 1 Personal growth is enhanced by knowledge, values and skills developed through participation in democratic processes and active citizenship.	Direct 7 Indirect 6 The development of enterprise and an understanding of the role of technology in society contribute to a sense of well-being.

confident learners who are able to work and learn individually and collaboratively. Key aspects of such development are: self-discipline, goal setting, an ability to set and meet deadlines, decision making, cooperation, self-respect, respect for others, willingness to accept responsibility for learning, interpersonal skills, effective communication, problem solving, critical thinking.

obligations wherever and whenever relevant to their learning and should be allowed to participate in their learning community without fear of prejudice. The principles of learning, teaching and assessment promote the provision of a safe and supportive learning environment.

# **CONCLUSION**

This Overarching Statement provides an overview of the curriculum from K-12. It emphasises the importance of considering the curriculum as a whole when planning students' education and the need to integrate learning across all areas of knowledge and human endeavour. It outlines the outcomes to which students are working in all aspects of their schooling and the teaching, learning and assessments strategies that will best help them achieve these outcomes. It will be a major reference point for the development of support documentation for the *Curriculum Framework for Kindergarten to Year 12 Education in Western Australia* and is intended be used as a stimulus and vehicle for whole-school planning and curriculum development. This Statement will be reviewed in the response to schools' experience in its implementation.

