Working with the cross-curriculum priorities

Advice on implementing the Australian Curriculum

DRAFT FOR CONSULTATION

What are the cross-curriculum priorities?

To equip young Australians with the skills, knowledge and understanding they need to prosper in a globalised world, the Australian Curriculum must be both relevant to the lives of students and address the contemporary issues they face.

The *Melbourne Declaration on Educational Goals for Young Australians* (2008) gives special attention to three cross-curriculum priorities:

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

Cross-curriculum priorities are embedded in all learning areas. They have a strong but varying presence depending on their relevance to each learning area.

How are the cross-curriculum priorities organised?

The Australian Curriculum provides information to support teachers using the cross-curriculum priorities. This includes:

- an introduction that describes the nature and scope of each cross-curriculum priority, its place in the learning areas and its evidence base
- organising ideas that reflect the essential knowledge, understanding and skills of each priority, which are embedded in the content descriptions and elaborations as appropriate.

<www.australiancurriculum.edu.au/CrossCurriculumPriorities>

Working with the cross-curriculum priorities in Queensland schools

In 2012, Queensland schools teach, assess and report on English, Mathematics and Science across Prep (P)[1] to Year 10 using the Australian Curriculum. The Queensland curriculum is maintained for all other learning areas.

In 2013, Queensland schools will plan, teach, assess and report on all Phase 1 learning areas, including History, across P–10 using the Australian Curriculum. Focus on the Queensland curriculum will be maintained for the remaining learning areas.

[1] The Foundation Year (F) of the Australian Curriculum is Prep (P) in Queensland and refers to the year before Year 1. Children beginning Prep in January are required to be five years of age by 30 June.

The cross-curriculum priorities, and the general capabilities, are relevant to both the Australian Curriculum and the Queensland curriculum. Schools plan teaching, learning and assessment to provide opportunities for students to engage with the cross-curriculum priorities when working with both curriculums.

The advice that follows supports schools in using the cross-curriculum priorities in teaching and learning by providing a brief overview of each priority and an example of how it can inform teaching, learning and assessment.

Aboriginal and Torres Strait Islander histories and cultures priority

Aboriginal and Torres Strait Islander communities are strong, rich and diverse. Aboriginal and Torres Strait Islander Identity is central to this priority and is intrinsically linked to living, learning Aboriginal and Torres Strait Islander communities, deep knowledge traditions and holistic world view.

A conceptual framework based on Aboriginal and Torres Strait Islander Peoples' unique sense of Identity has been developed as a structural tool for the embedding of Aboriginal and Torres Strait Islander histories and cultures within the Australian Curriculum. This sense of Identity is approached through the interconnected aspects of Country/Place, People and Culture. Embracing these elements enhances all areas of the curriculum.

The Aboriginal and Torres Strait Islander priority provides opportunities for all learners to deepen their knowledge of Australia by engaging with the world's oldest continuous living cultures. This knowledge and understanding will enrich their ability to participate positively in the ongoing development of Australia.

Diagram 1: Aboriginal and Torres Strait Islander cross-curriculum priority

Organising ideas

The organising ideas for the Aboriginal and Torres Strait Islander histories and cultures priority are embedded in the content descriptions and elaborations of each learning area as appropriate.

Table 1: Organising ideas for the Aboriginal and Torres Strait Islander histories and cultures priority

Code	Organising ideas
Country/Place	
OI.1	Australia has two distinct Indigenous groups, Aboriginal Peoples and Torres Strait Islander Peoples.
OI.2	Aboriginal and Torres Strait Islander communities maintain a special connection to and responsibility for Country/Place throughout all of Australia.
OI.3	Aboriginal and Torres Strait Islander Peoples have unique belief systems and are spiritually connected to the land, sea, sky and waterways.
Culture	
OI.4	Aboriginal and Torres Strait Islander societies have many Language Groups.
OI.5	Aboriginal and Torres Strait Islander Peoples' ways of life are uniquely expressed through ways of being, knowing, thinking and doing.
OI.6	Aboriginal and Torres Strait Islander Peoples have lived in Australia for tens of thousands of years and experiences can be viewed through historical, social and political lenses.
People	
OI.7	The broader Aboriginal and Torres Strait Islander societies encompass a diversity of nations across Australia.
OI.8	Aboriginal and Torres Strait Islander Peoples have sophisticated family and kinship structures.
OI.9	Australia acknowledges the significant contributions of Aboriginal and Torres Strait Islander people locally and globally.

The above information about the Aboriginal and Torres Strait Islander histories and cultures cross-curriculum priority is available from the Australian Curriculum website: <www.australiancurriculum.edu.au/CrossCurriculumPriorities/Aboriginal-and-Torres-Strait-Islander-histories-and-cultures>

Using the Aboriginal and Torres Strait Islander histories and cultures priority

The Aboriginal and Torres Strait Islander histories and cultures priority can be used for teaching and learning in each of the learning areas. Examples showing how the Aboriginal and Torres Strait Islander histories and cultures priority can be used in teaching and learning are provided in the following exemplar unit overviews that form part of the resources the Queensland Studies Authority (QSA) has developed to support educators to plan for the implementation of the Australian Curriculum:

- Year 2 unit overview — Mathematics exemplar (*Is the whole greater than the sum of its parts?*)
  www.qsa.qld.edu.au/13656.html#overview
- Year 8 unit overview — English exemplar (*Personal stories*)
  www.qsa.qld.edu.au/13655.html#overview
- Year 9 unit overview — Science exemplar (*Waves and particles*)
  www.qsa.qld.edu.au/13658.html#overview

Table 2: Year 2 Mathematics

<table>
<tr><td colspan="3">Year 2 Mathematics: Is the whole greater than the sum of its parts?
www.qsa.qld.edu.au/13656.html#overview</td></tr>
<tr><td colspan="3">Unit outline (p.1)
Children investigate fractions as an expansion of fair sharing and an introduction to division. Children connect and explain the social and mathematical meaning of common fractions in the contexts of time, collections, and whole numbers.
Children explain and represent 1/2, 1/4 and 1/8 in different ways (p. 6)
• Introduce the concept of a quarter and the relationship with a half and a whole, e.g. cut fruit into four equal parts.
• Introduce the concept of an eighth and relationship to a whole.
• Use concrete materials to demonstrate comparing with one-to-one matching strategies.
• Develop checking strategies for equivalence.</td></tr>
<tr><td colspan="3">Aboriginal and Torres Strait Islander histories and cultures priority</td></tr>
<tr><td colspan="2">Organising idea</td><td>Using the organising ideas for teaching and learning</td></tr>
<tr><td>OI.5</td><td>Aboriginal and Torres Strait Islander Peoples' ways of life are uniquely expressed through ways of being, knowing, thinking and doing.</td><td>The Maths as Storytelling (MAST) approach provides opportunities for teaching and learning experiences that explore the different ways Aboriginal peoples and Torres Strait Islander peoples think about and represent numbers.
The approach uses symbols and story as a method for solving mathematical problems. The following link demonstrates a Year 2 example of mathematical reasoning using the Maths as Storytelling approach.
www.qsa.qld.edu.au/3035.html > Resources > Culture and mathematics.</td></tr>
</table>

Table 3: Year 8 English

Year 8 English: *Personal stories*
www.qsa.qld.edu.au/13655.html#overview

Unit outline (p.1)

Students investigate personal stories in a range of media texts including newspapers, magazines and digital texts and how personal identity and representations of individuals and groups are created.

Students develop an understanding of:

- the power of the media to influence how different groups are represented
- how media texts are influenced by context, purpose and audience
- the effectiveness of how language choices are used to influence readers, viewers and listeners
- how non-stereotypical characters challenge representations of groups in the media
- how to confidently express and support their own opinions with evidence from texts.

Inquiry questions for the unit:

- How do media texts reflect or challenge the values of individuals and groups?
- What are the features of a personal story?
- Why are stereotypes created in the media?
- How do visual and multimodal texts allude to other texts or images to enhance and layer meaning?

Aboriginal and Torres Strait Islander histories and cultures priority

Organising ideas	Using the organising ideas for teaching and learning
The stories selected for study in the unit will determine which of the organising elements are relevant to teaching and learning.	Teachers select stories from: • different Aboriginal and Torres Strait Islander histories and cultures • a particular Aboriginal culture or Torres Strait Islander culture across different points in time • a particular Aboriginal culture or Torres Strait Islander culture at a particular point in time. Teachers use the organising ideas relevant to the selected stories to provide students with opportunities to build their understanding of Aboriginal and Torres Islander histories and cultures.

Table 4: Year 9 Science

Year 9 Science: *Waves and particles*
www.qsa.qld.edu.au/13658.html#overview

Unit outline (p.1)

Students explore the atomic and wave models, developing understanding through targeted activities. The atomic and wave models build on students' understanding of the particle model explored in Year 8, demonstrating how models are developed over time through the process of scientific inquiry.

This unit has three overarching aims — that students understand:

- phenomena that can only be observed indirectly can be described and explained by scientific models and theories
- models and theories are refined over time through observation, hypothesis and experimentation
- advances in technology can lead to modifications in the modelling used to describe phenomena.

Questions that shape the inquiry:

- How does energy get transferred by waves?
- Can a model used to explain mechanical waves work for electromagnetic waves?
- How does sound and light energy get transferred by waves and in what ways are they similar and how are they different?
- How do technologies (e.g. mobile phones and medical devices) make use of electromagnetic radiation and radioactive decay?
- Are claims in the media that mobile phones are not safe to use justified?
- What fundamental principles explain how Aboriginal and Torres Strait Islander traditional hunting tools and musical instruments work?
- How do scientists determine the structure of something they cannot see?

Aboriginal and Torres Strait Islander histories and cultures priority

Organising idea		Using the organising ideas for teaching and learning
OI.3	Aboriginal and Torres Strait Islander Peoples have unique belief systems and are spiritually connected to the land, sea, sky and waterways.	Students have opportunities to learn about how Aboriginal peoples and Torres Strait Islander peoples describe and explain a variety of phenomena.
OI.5	Aboriginal and Torres Strait Islander Peoples' ways of life are uniquely expressed through ways of being, knowing, thinking and doing.	By studying physical phenomena in this unit, students have opportunities to learn about the ways Aboriginal peoples and Torres Strait Islander peoples: • think about and understand the natural world • act on and express these understandings.

Other QSA resources

The QSA provides a variety of resources teachers can use to support the Aboriginal and Torres Strait Islander histories and cultures priority.

Guidelines

The following guidelines to support the inclusion of the Aboriginal and Torres Strait Islander histories and cultures priority are available from the QSA website:
www.qsa.qld.edu.au/3035.html > Guidelines

- *Countering racism in schools* — Strategies to prevent racism in school settings and ways to educate students on the issue of racism.
- *Oral histories* — Covers the stages necessary to complete an oral history project, from preparation through to interview.
- *Ethical research in Indigenous studies* — A guiding framework for teachers and students conducting research with or about Indigenous peoples.
- *Selecting and evaluating resources* — Criteria for choosing appropriate texts about Aboriginal peoples and Torres Strait Islander peoples for classroom use.
- *Working with Aboriginal and Torres Strait Islander guest speakers* — Describes appropriate protocols, cultural understandings and processes when engaging an Aboriginal or Torres Strait Islander guest speaker in a variety of settings.

Resources

The following resources to support the inclusion of the Aboriginal and Torres Strait Islander histories and cultures priority are available from the QSA website:
www.qsa.qld.edu.au/3035.html > Resources

- *Culture and Mathematics* — Supports teachers to embed Aboriginal perspectives and Torres Strait Islander perspectives in the Mathematics curriculum.
- *Dialogue circles* — Describes the process of using dialogue circles as a teaching and learning strategy to build respectful relationships, learn from a collective group and to preserve and pass on cultural knowledge.
- *Building relationships with local communities* — Presents a flowchart of how to engage with local community and how to access information on consultation protocols.
- *Relationships to Country — Aboriginal and Torres Strait Islander peoples*: Describes the diverse relationships that Aboriginal peoples and Torres Strait Islander peoples have with the Australian environment.
- T*he history of land rights in Australia* — Presents an overview of the land claims and rights of Aboriginal peoples across Australia from the 1800s to the1980s.
- *Aboriginal ceremonies* — Discusses various ceremonial roles and practices and the importance of The Dreaming in ceremonies.
- *Birth ceremonies, totems and rites in Aboriginal society* — Discusses the diverse ceremonies, rites and totems involved with the birth of a child in some Aboriginal language groups.
- *Defining Aboriginal stories* — Describes the types of stories that exist within Aboriginal cultures and the importance of oral traditions and exchange.
- *Visual arts and Aboriginal knowledge* — Explores the ceremonial significance and roles that visual arts practices have within Aboriginal language groups throughout Australia.

School case study

- *A week on Badu Island* — Focuses on a Prep class at Badu Island State School. www.qsa.qld.edu.au/3032.html > Badu Island case study

Readings

The following readings to support the inclusion of the Aboriginal and Torres Strait Islander histories and cultures priority are available from the QSA website: www.qsa.qld.edu.au/3035.html > Readings

- *Too obvious to see* — A paper by Penny Tripcony explaining the basis of Aboriginal spirituality.
- *The gift of identity* — A paper by Jackie Huggins exploring the complexity and multi-layered nature of identity, in particular, an empowering sense of Aboriginality.
- *Englishes and literacies* — A paper by Penny Tripcony exploring the variety of literacies relevant to Indigenous students and their communities, and offering some suggestions for educators to work more effectively with these students.
- *Assimilation and discrimination* — Extracts from Charles Duguid's 1963 classic, *No Dying Race*, detailing particular incidents of racial discrimination during the assimilation period of the 1930s to the 1960s.
- *Palm Island case study* — An article by journalist Cameron Forbes about land rights legislation proposed in Queensland under the Bjelke-Petersen government and how this was seen by, and relevant to, Palm Islanders.
- *Wave Hill: A ceremonial return* — Extracts from the inaugural Vincent Lingiari Memorial Lecture, delivered by Governor-General Sir William Deane in 1996, on the practical and symbolic importance of the 1966 Wave Hill strike and the subsequent grant of a lease to the local Gurindji people.
- *"a" is for apple* — A paper by Jackie Huggins on the unfair treatment of Aboriginal peoples and Torres Strait Islander peoples in written texts, including racist terminology and spelling.
- *Torres Strait Islander zugabal (constellations)* — A colourful star map showing key Torres Strait Islander zugubal contrasted with Western constellations.
- *Torres Strait Islander season calendar: Introduction* — This file introduces the calendar, its source, and printing options.
- *Torres Strait Islander season calendar: Calendar of events* — Colourful A4 poster detailing key seasonal changes in seasons, winds, bird migrations, sea animals and plant life.
- *Torres Strait Islander season calendar: Calendar of seasons* — Colourful A4 poster detailing key seasonal changes in stars.
- *Apology to stolen generations: questions and answers* — Information about the Federal Government's proposed apology to the stolen generations. Compiled by Reconciliation Australia.
- *Australia's apology to Indigenous peoples: transcript* — Speech presented to Parliament by Kevin Rudd on 13 February 2008. First mooted as an apology to Australia's stolen generations, Hansard recorded it as an apology to Australia's Indigenous peoples. The motion of apology was passed unanimously.

Research

The following research to support the inclusion of the Aboriginal and Torres Strait Islander histories and cultures priority is available from the QSA website: www.qsa.qld.edu.au/6322.html > Papers

- *Summary: Australian Indigenous students*
- *Australian Indigenous students: Addressing equity issues*
  Klenowski, Val (2008) Queensland University of Technology, Australia
- *Summary: A model of school change for culturally and linguistically divers students in New Zealand*
- *A model of school change for culturally and linguistically divers students in New Zealand: A summary and evidence from systemic replication*
  McNaughton, Stuart and Mei Kuin Li (2008) Woolf Fisher Research Centre, University of Auckland, New Zealand
- *Summary: The impact of high-stakes accountability policies on Native American learners*
- *The impact of high-stakes accountability policies on Native American learners: Evidence from research*
  McCarty, Teresa L (2008) Arizona State University, USA
- *Summary: Culturally responsive schooling for Indigenous youth*
- *Culturally responsive schooling for Indigenous youth*
  Brayboy, Bryan McKinley Jones (2008) University of Alaska Fairbanks, USA

Asia and Australia's engagement with Asia priority

The Asia and Australia's engagement with Asia priority provides a regional context for learning in all areas of the curriculum. It reflects Australia's extensive engagement with Asia in social, cultural, political, and economic spheres.

Many Asian nations are growing rapidly and are regionally and globally influential. Immigrants from all these countries have historically contributed to Australia's development and will continue to do so in the future. An understanding of Asia underpins the capacity of Australian students to be active and informed citizens working together to build harmonious local, regional and global communities, and build Australia's social, intellectual and creative capital. It also builds understanding of the diversity of cultures and peoples living in Australia, fosters social inclusion and cohesion and is vital to the prosperity of Australia.

This priority will ensure that students learn about and recognise the diversity within and between the countries of the Asia region. They will develop knowledge and understanding of Asian societies, cultures, beliefs and environments, and the connections between the peoples of Asia, Australia, and the rest of the world. Asia literacy provides students with the skills to communicate and engage with the peoples of Asia so they can effectively live, work and learn in the region.

What encompasses Asia?

Asia can be defined in geographical terms, but it can also be described in terms of cultural, religious, historical and language boundaries or commonalities.

While it includes West and Central Asia, in Australian schools studies of Asia will pay particular attention to the sub-regions of:

- North-east Asia, including China, Mongolia, Japan, North Korea, South Korea and Taiwan
- South-east Asia, including Indonesia, Myanmar (Burma), Thailand, Malaysia, Brunei, Singapore, Vietnam, Laos, East Timor, the Philippines and Cambodia
- South Asia, including India, Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka and the Maldives.

Organising ideas

The organising ideas for the Asia and Australia's engagement with Asia priority are embedded in the content descriptions and elaborations of each learning area as appropriate.

Table 5: Organising ideas for Asia and Australia's engagement with Asia priority

Code	Organising ideas
Asia and its diversity	
OI.1	The peoples and countries of Asia are diverse in ethnic background, traditions, cultures, belief systems and religions.
OI.2	Interrelationships between humans and the diverse environments in Asia shape the region and have global implications.
Achievements and contributions of the peoples of Asia	
OI.3	The peoples and countries of Asia have contributed and continue to contribute to world history and human endeavour.
OI.4	The arts and literature of Asia influence aesthetic and creative pursuits within Australia, the region and globally.
Asia–Australia engagement	
OI.5	Collaboration and engagement with the peoples of Asia support effective regional and global citizenship.
OI.6	Australia is part of the Asia region and our histories from ancient times to the present are linked.
OI.7	Australians play a significant role in social, cultural, political and economic developments in the Asia region.
OI.8	Australians of Asian heritage have influenced Australia's history and continue to influence its dynamic culture and society.

The above information about the Asia and Australia's engagement with Asia cross-curriculum priority is available from the Australian Curriculum website: <www.australiancurriculum.edu.au/CrossCurriculumPriorities/Asia-and-Australias-engagement-with-Asia>

Using the Asia and Australia's engagement with Asia priority

The Asia and Australia's engagement with Asia priority can be used for teaching and learning in each of the learning areas. Examples showing how the Asia and Australia's engagement with Asia priority can be used in teaching and learning are provided in the following exemplar units that form part of the resources the QSA has developed to support educators to plan for the implementation of the Australian Curriculum:

- Year 2 unit overview — English exemplar (*Finding and using information*) www.qsa.qld.edu.au/13655.html#overview
- Year 3 unit overview — Mathematics exemplar (*Exploring shapes and angles*) www.qsa.qld.edu.au/13656.html#overview
- Year 8 unit overview — Science exemplar (*Energy for my lifestyle*) www.qsa.qld.edu.au/13658.html#overview

Table 6: Year 2 English

<table>
<tr><td colspan="3">Year 2 English: Finding and using information
www.qsa.qld.edu.au/13655.html#overview</td></tr>
<tr><td colspan="3">Unit outline (p.1)
Children listen to, read, view and interpret audio, electronic, digital, written and multimodal texts which are designed to inform. These informative texts present new content about topics of interest and link to topics being studied in other areas of the curriculum.
Children understand:
• the structure and organisation of informative and procedural texts
• new vocabulary for informative and procedural texts
• how illustrations and diagrams support the meaning of informative texts.
Inquiry questions for the unit:
• What familiar informative texts are found and used in everyday life?
• How is information presented in different ways, using illustrations and diagrams to add meaning?
• How do we choose language to make instructions clear?
• How do we express and give reasons for preferences?</td></tr>
<tr><td colspan="3">Asia and Australia's engagement with Asia priority</td></tr>
<tr><td colspan="2">Organising idea</td><td>Using the organising ideas for teaching and learning</td></tr>
<tr><td>OI.1</td><td>The peoples and countries of Asia are diverse in ethnic background, traditions, cultures, belief systems and religions.</td><td>Children have opportunities to develop early awareness of diversity through:
• exploration of rituals associated with food
• reading, viewing and discussing a range of digital and print-based informative texts
• collaboratively, and with teacher support, researching, writing and illustrating an information report on traditional food preparation.</td></tr>
</table>

Table 7: Year 3 Mathematics

Year 3 Mathematics: *Exploring shapes and angles* www.qsa.qld.edu.au/13656.html#overview		
Unit outline (p.1) Students identify and use their knowledge and understandings of angles, symmetry and three-dimensional shapes to design a robot that meets a design brief. The big idea of this unit is exploring the way angles and symmetry in shapes can be used to create or enhance designs. Inquiry questions for the unit: • What is an angle? • What is symmetry? • Where do angles and symmetry exist in natural and built environments? • How can you use angles and symmetry to create or enhance a design? • What are key features of three-dimensional shapes?		
Asia and Australia's engagement with Asia priority		
Organising idea		**Using the organising ideas for teaching and learning**
OI.1	The peoples and countries of Asia are diverse in ethnic background, traditions, cultures, belief systems and religions.	Students have opportunities to investigate different styles of kites from the Asian region as a context for developing students' mathematical knowledge, skills and understanding.
OI.8	Australians of Asian heritage have influenced Australia's history and continue to influence its dynamic culture and society.	By investigating kites from Asia and Australia in this unit, students have opportunities to draw on knowledge of, and examples from, the Asian region to: • identify and recognise the occurrence of angles and symmetry in different kites • compare the symmetry of different kites • identify, recognise and label straight, right and equivalent angles and symmetry in kite design.

Table 8: Year 8 Science

Year 8 Science: *Energy for my lifestyle* www.qsa.qld.edu.au/13658.html#overview		
Unit outline (p.1) Students explore how energy, in its many different forms, is an essential part of our daily lives. They investigate how we generate energy, how it is transformed, and how energy generation has changed as our energy requirements have increased over time. Students conduct research on the subsequent impact on industry, agriculture, and marine and terrestrial resource management and analyse the sustainability of the current methods of energy generation. They use this analysis to consider why the future of energy generation must take into account the positive and negative effects on the sustainability of systems. Students consider what the future will hold in terms of energy generation. Questions that shape the inquiry include: • What is energy? What are the different forms of energy? • How is energy transferred? How is energy transformed? • What are the sources of energy used by society? • How is energy generated to meet the requirements of society? • Are the methods for generating energy sustainable? • What causes change in systems? • What will be the long-term impacts (on, for example, industry, agriculture and/or marine and terrestrial resource management) if the methods for generating energy are not sustainable? • How can our everyday practices promote sustainable systems? Are there ethical issues that need to be considered?		
Asia and Australia's engagement with Asia priority		
Organising idea		**Using the organising ideas for teaching and learning**
OI.2	Interrelationships between humans and the diverse environments in Asia shape the region and have global implications.	Students have opportunities to investigate the development of sustainable energy sources and technologies in the Asia–Pacific region as a context for developing students' science knowledge, understanding and skills.

Other resources

The Asia Education Foundation has developed a range of resources teachers can use to support the Asia and Australia's engagement with Asia priority:
<www.asiaeducation.edu.au/for_teachers/australian_curriculum_landing_page.html>

The resources available support numerous learning areas in the Australian Curriculum including:

- English
  Resources to support the Australian Curriculum: English are aimed at preparing students for our culturally diverse society and to give them the ability to interact globally and to articulate creatively and critically the ways in which our identities and cultures are connected. Resources are available for primary and secondary classrooms.
  <www.asiaeducation.edu.au/teachers/curriculum_resources/english_cr/english_landing.html>
- Mathematics
  The *Asia Counts Series* provides resources for primary and secondary classrooms to support students developing and applying a sense of numbers and measurement, a spatial sense, an ability to handle data and interpret changing situations, and a capacity to recognise and describe patterns and trends.
  <www.asiaeducation.edu.au/teachers/curriculum_resources/maths/mathematics.html>
- Science
  Images of Asia: Innovations is a resource which explores examples of technical and cultural innovation in eight countries of Asia.
  <www.asiaeducation.edu.au/teachers/curriculum_resources/science/science_cr.html>

Sustainability priority

Sustainability addresses the ongoing capacity of Earth to maintain all life.

Sustainable patterns of living meet the needs of the present without compromising the ability of future generations to meet their needs. Actions to improve sustainability are both individual and collective endeavours shared across local and global communities. They necessitate a renewed and balanced approach to the way humans interact with each other and the environment.

Education for sustainability develops the knowledge, skills, values and world views necessary for people to act in ways that contribute to more sustainable patterns of living. It enables individuals and communities to reflect on ways of interpreting and engaging with the world. Sustainability education is futures-oriented, focusing on protecting environments and creating a more ecologically and socially just world through informed action. Actions that support more sustainable patterns of living require consideration of environmental, social, cultural and economic systems and their interdependence.

Organising ideas

The organising ideas for the Sustainability priority are embedded in the content descriptions and elaborations of each learning area as appropriate.

Table 5: Organising ideas for the Sustainability priority

Code	Organising ideas
Systems	
OI.1	The biosphere is a dynamic system providing conditions that sustain life on Earth.
OI.2	All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.
OI.3	Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.
World views	
OI.3	World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice are essential for achieving sustainability.
OI.4	World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community actions for sustainability.
Futures	
OI.5	The sustainability of ecological, social and economic systems is achieved through informed individual and community action that values local and global equity and fairness across generations into the future.
OI.6	Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.
OI.7	Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgments based on projected future economic, social and environmental impacts.
OI.8	Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.

The above information about the Sustainability cross-curriculum priority is available from the Australian Curriculum website:
<www.australiancurriculum.edu.au/CrossCurriculumPriorities/Sustainability>

Using the Sustainability priority

The Sustainability priority can be used for teaching and learning in each of the learning areas. Examples showing how the Sustainability priority can be used in teaching and learning are provided in the following exemplar units that form part of the resources the QSA has developed to support educators to plan for the implementation of the Australian Curriculum:

- Year 2 unit overview — Science exemplar (*Good to grow*)
  www.qsa.qld.edu.au/13658.html#overview
- Year 6 unit overview — English exemplar (*Online news*)
  www.qsa.qld.edu.au/13655.html#overview
- Year 8 unit overview — Mathematics exemplar (*Data investigation*)
  www.qsa.qld.edu.au/13656.html#overview

Table 6: Year 2 Science

<table>
<tr><td colspan="3">Year 2 Science: Good to grow
www.qsa.qld.edu.au/13658.html#overview</td></tr>
<tr><td colspan="3">Unit outline (p. 1)
Children learn that observations can be organised to reveal patterns, and that these patterns can be used to make predictions about phenomena. They learn about how science is used in their daily lives, including caring for their environment and living things. Children learn about how Earth's resources, including water, are used in a variety of ways. Children inquire about how living things grow, change and have offspring similar to themselves as they develop a community garden.
Questions that shape the inquiry include:
• What are the living things in our garden?
• Which of Earth's resources are needed in our garden?
• How do Earth's resources support life in our garden?
• What is the relationship between living things in our garden?
• How could I help the living things in our garden to continue to grow?
• How could this garden help me?</td></tr>
<tr><td colspan="3">Sustainability priority</td></tr>
<tr><td colspan="2">Organising idea</td><td>Using the organising ideas for teaching and learning</td></tr>
<tr><td>OI.2</td><td>All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.</td><td>Children have opportunities to explore and examine:
• how ecosystems work in gardens
• their own relationship to, and role in, this ecosystem
• their dependence on gardens and similar ecosystems for food production.</td></tr>
</table>

Table 7: Year 6 English

<table>
<tr><td colspan="2">Year 6 English: Online news
www.qsa.qld.edu.au/13655.html#overview</td></tr>
<tr><td colspan="2">Unit outline (p.1)
Students investigate online media texts, including images, figures, tables and diagrams to understand how they contribute to understanding meaning in informative and persuasive texts.
Students develop an understanding of:
• the deliberate selection of vocabulary and analytical images that extend meaning
• text-processing strategies
• comparison and analysis of print-based newspapers and online news sites
• the structure and features of a news report.
Inquiry questions for the unit:
• What are the similarities and differences between print-based and online newspapers?
• What are the textual features and structures of newspaper reports and editorials?
• How do different media texts inform and persuade readers to a particular point of view?
• Who accesses online news?</td></tr>
<tr><td colspan="2">Sustainability priority</td></tr>
<tr><td>Organising idea</td><td>Using the organising ideas for teaching and learning</td></tr>
<tr><td>The media texts selected for study in the unit will determine which of the organising elements are relevant to teaching and learning.</td><td>Teachers use the Year level description for Year 6 English and the organising idea/s to select media texts for study in class. The organising idea/s can be used to thematically group texts studied in class, but the focus for teaching and learning is the content descriptions for Year 6 English.
Across the unit, students may have opportunities to listen to, read and view media texts offering different perspectives on a variety of issues.</td></tr>
</table>

Table 8: Year 8 Mathematics

Year 8 Mathematics: *Data investigation* www.qsa.qld.edu.au/13656.html#overview		
Unit outline (p. 1) Students develop their understanding of the basic concepts of probability and data representation. Students learn about collecting, analysing, and displaying representative data and assigning probabilities where appropriate. Students develop knowledge about ideas concerning type of data, appropriateness of display, calculated measures, analysis and the effect of outliers. Students also explore the logic that underpins scenarios involving chance. The big ideas of the unit include: • statistical analysis is a powerful tool that is used in real-world situations where data are able to be collected • data can be displayed and represented in various ways • data can be used to make predictions • probability can be used to make predictions. The focus questions that can lead inquiries in this unit are: • What data can we gather to make informed decisions? • What do we need to do with this data to make informed decisions? • How can we predict the outcomes of events? • How do we assign values to different predictions?		
Sustainability priority		
Organising idea		**Using the organising ideas for teaching and learning**
OI.7	Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgments based on projected future economic, social and environmental impacts.	The knowledge, understanding and skills students build about collecting and working with data can be applied to make decisions about economic, social and environmental sustainability. Students have opportunities to represent non-rule-based data, e.g. water consumption over a month.

Other resources

The Queensland Sustainable Schools website has developed a range of resources teachers can use to support the Sustainability priority: <www.sustainableschools.qld.edu.au>