

# Queensland response to the draft Australian Curriculum general capabilities

---

September 2011

# Contents

<b>Introduction</b> .....	<b>3</b>
Key strengths .....	3
Key issues and concerns .....	4
<b>Analysis of key issues and concerns</b> .....	<b>5</b>
1. Nature of the general capabilities.....	5
2. The relationship between the general capabilities and the cross- curriculum priorities.....	7
3. The relationship between the general capabilities and the content descriptions .....	7
4. Interpreting assessment messages and the general capabilities .....	9
5. The role of the theoretical frameworks.....	9
6. The two-year juncture models across the continua.....	10
7. Aboriginal and Torres Strait Islander perspectives.....	10
8. Special education considerations.....	11
9. Language terminology, format, consistency of descriptions.....	12
10. Levelness of capability descriptions.....	13
11. Resourcing to support the general capabilities .....	13
12. Year 12 juncture messages .....	14
<b>Analysis of the general capabilities</b> .....	<b>15</b>
Literacy.....	15
Numeracy.....	19
Information and communication technology (ICT) competence.....	22
Critical and creative thinking.....	26
Personal and social competence.....	31
Ethical behaviour.....	34
Intercultural understanding.....	38
<b>Appendix A: Numeracy references</b> .....	<b>43</b>

# Introduction

The Queensland Studies Authority (QSA) in partnership with Education Queensland (EQ), Queensland Catholic Education Commission (QCEC) and Independent Schools Queensland (ISQ) appreciates the opportunity to provide feedback on the draft general capabilities. Queensland supports the development of an Australian Curriculum that will provide consistent and explicit curriculum expectations across the nation.

This response is a summary of the collated Queensland feedback from:

- representative curriculum and learning area committees of the QSA
- professional associations
- representatives of the three schooling sectors, representing and advocating for 1400 EQ schools, 288 Catholic schools and 188 Independent schools.

Queensland's consultation identified strengths and a range of issues and concerns for ACARA's consideration when redrafting the general capabilities.

This response is organised in the following way:

- an overview of the key strengths, issues and concerns
- an analysis of the key issues and concerns with suggested ways forward
- an analysis of specific details about each of the seven general capabilities and a way forward for each identified issue and concern.

## Key strengths

The QSA, EQ, QCEC and ISQ agree that the draft general capabilities show the following strengths.

- There is an alignment between the general capabilities and the *Melbourne Declaration on Educational Goals for Young Australians* (2008).
- The general capabilities are valued by Queensland educators as aspirational expectations for students progressing through schooling.
- The general capabilities provide a genuine opportunity to link with and enrich the learning areas.
- The consistent structure of information about each general capability makes it easy to read and follow:
  - the conceptual statement — includes an introduction, scope, capability across the curriculum, and theoretical framework
  - the continuum — includes elements and capability descriptions.
- A genuine attempt has been made to reflect current research across the general capabilities.
- Both formats of presentation of the capability descriptions are significantly reported in feedback as useful.

## Key issues and concerns

The following key issues and concerns have been identified for consideration in the redrafting of the general capabilities:

- the nature of the general capabilities
- the relationship between the general capabilities and the cross-curriculum priorities
- the relationship between the general capabilities and the content descriptions
- interpreting assessment messages and the general capabilities
- the role of the theoretical framework
- the two-year juncture models across the continua
- Aboriginal and Torres Strait Islander perspectives
- special education considerations
- language, terminology, format, and consistency of descriptions
- levelness of capability descriptions
- resourcing to support the general capabilities
- Year 12 juncture messages.

# Analysis of key issues and concerns

## 1. Nature of the general capabilities

### 1.1 *Inconsistency in descriptions*

The general capabilities are a mixture of:

- skills — Literacy, Numeracy, Critical and creative thinking
- competencies — Information and communication technology (ICT) competence, Personal and social competence
- understandings — Intercultural understanding
- behaviours — Ethical behaviour

The bundling of this mix together as general capabilities challenges teacher understanding as the descriptions across the capabilities are written in different ways, with various grain sizes of detail and unknown internal frameworks. It is not clear what the knowledge, skills and dispositions are in each capability.

#### **Way forward**

Consider:

- describing the general capabilities in the same way. At the moment the general capabilities are variously described as skills, competencies, understandings, behaviours, knowledge, attributes and dispositions.
- that they are all general capabilities with a substructure of knowledge, skills and dispositions. If “disposition” is problematic, then we suggest keeping to knowledge and skills.

Primary teachers especially will appreciate a consistent structure.

### 1.2 *Literacy and Numeracy*

Literacy and Numeracy are likely to be treated differently by teachers as they are tested nationally and hold a central place in all of our current systems. It is recognised that schools should be dealing with the other general capabilities. However, many felt that they should not be formally assessed.

#### **Way forward**

Consider separating Literacy and Numeracy from the other general capabilities. ACARA has already treated these general capabilities differently through the Years 2, 4, 6, 8 and 10-juncture framework, and will be providing further adjustments or updates about NAPLAN.

### 1.3 *Lack of clarity about literacy in the curriculum*

There is a lack of clarity about literacy in the curriculum. Literacy is variously:

- an organiser in the English learning area

- a general capability
- a critical national testing component.

#### **Way forward**

Clearly position and explain literacy across all of its relationships in the curriculum.

### **1.4 Lack of clarity about what is “essential”**

The general capabilities are described differently within the overview. Four of the general capabilities — Literacy, Numeracy, Information and communication technology (ICT) competence and Critical and creative thinking — are described as “essential tools” which implies that the other three are not “essential”.

#### **Way forward**

Clarify the language about what is “essential”. One model could be:

- Essential capabilities — Literacy and Numeracy
- General capabilities — Information and communication technology (ICT) competence, Critical and creative thinking, Ethical behaviour, Personal and social competence, Intercultural understanding.

### **1.5 Lack of clarity about purpose and role**

The purpose and role of the general capabilities remains unclear:

“They support and elaborate on learning area content but do not add to it.”

It is unclear whether the general capabilities align with the expectations of the content descriptions at each juncture or add to the learning area content within the juncture. Further explanation is required for teachers who are between juncture end points.

#### **Way forward**

- Clarify the relationship of each capability to learning area content. Providing such advice will assist teachers to fine-tune planning.
- Provide advice for teachers for planning within the juncture.

### **1.6 Limited access to general capabilities information**

Accessing and viewing all information about the general capabilities and their relationship to the content descriptions is difficult on the Australian Curriculum website. Teachers will predominantly click on specific links to the general capabilities, possibly without knowing or referring to background information, such as the conceptual statement, or descriptions at the juncture before. Providing access to a printable document containing all general capabilities information would be valuable.

#### **Way forward**

- Provide a PDF or Microsoft Word version of all general capabilities information on the website. This will potentially encourage teachers to collate and read all of the information about the general capabilities.
- Include online messages to remind teachers to be aware of:
  - descriptions before and after their juncture of interest
  - general information.

## 2. The relationship between the general capabilities and the cross-curriculum priorities

### 2.1 Generality in description is misleading

While ACARA has requested separate feedback about the general capabilities and the cross-curriculum priorities, a concern expressed by educators in the Queensland consultation is that they are not discretely described. Queensland educators agree that all of the general capabilities and cross-curriculum priorities are important but the way they are grouped, their function, and the language used to describe them is problematic.

- The general capabilities do not appear to be “general”. The term “essential” is used and they have an obvious “across the learning areas” functionality. There are descriptions at junctures to give teachers clear advice across the years of schooling.
- The cross-curriculum priorities are supposed to be “priorities” yet teachers receive only “general” organising ideas that are meant to be interpreted across all years of schooling. Such advice is very “general”. The concern is that such “generality” may lead to a lack of focus in planning despite their “priority”.

#### Way forward

- Provide greater clarity about the relationship between the general capabilities, the cross-curriculum priorities and the learning area content descriptions.
- Ensure both the general capabilities and the priorities are explicit within the pop-up box for each content description, if appropriate.

## 3. The relationship between the general capabilities and the content descriptions

### 3.1 Concept of “embedded” is unclear

The concept of the general capabilities being “embedded” within the content descriptions is unclear. The term “embedded” is used regularly. For example:

“In the Australian Curriculum, general capabilities are embedded in the content of each learning area as appropriate.”

See: [www.acara.edu.au/verve/\\_resources/Information\\_Sheet\\_General\\_Capabilities\\_file.pdf](http://www.acara.edu.au/verve/_resources/Information_Sheet_General_Capabilities_file.pdf)

“In the Australian Curriculum: English, each of the seven general capabilities is embedded (where appropriate) in the content descriptions or elaborations.”

See: [www.australiancurriculum.edu.au/English/General-capabilities](http://www.australiancurriculum.edu.au/English/General-capabilities)

It is unlikely that the general capabilities descriptions are taught naturally within a content description unless they are explicitly identified and described similarly. It is more likely that there is an opportunity to include teaching related to the general capability when teaching the content description.

#### Way forward

- Clarify the relationship and the “level of embedding”.
- Explain how teaching a content description provides embedded teaching of a capability.

### 3.2 *Content descriptions not linked to general capabilities*

The tagging process links a capability title, such as Literacy, with a content description. There is no direct link to a capability description. Teachers are asked to unpack an elaboration to find the relationship between the capability and the content description. Quite often this is not obvious. This is unsatisfactory.

#### **Way forward**

Include a link to the actual capability description in the pop-up box, and include an explanation or reasoning behind why the content descriptions are tagged, when it is not obvious.

### 3.3 *Insufficient explanation of tagging*

Many content descriptions are not comprehensively tagged and so they do not link to general capabilities that it would seem obvious to include. For example, in Year 10 Science, “The transmission of heritable characteristics from one generation to the next involves DNA and genes” should link to Ethical behaviour.

It is acknowledged that tagging of general capabilities with content descriptions is useful but can never be comprehensive. Participants stated that it is preferable to encourage teachers to find their own opportunities to link descriptions with general capabilities, suitable to their own contexts.

#### **Way forward**

Provide a better explanation of the rationale behind tagging and emphasise that the tags are examples only.

### 3.4 *Lack of clarity about where general capabilities should be taught*

Explicit direction is needed on which learning areas provide more capacity to develop particular general capabilities. Teachers will appreciate clarity if the expectation is that some general capabilities should or must be taught in specific learning areas.

#### **Way forward**

Show more clearly where the general capabilities should or must be taught.

### 3.5 *Specialist curriculum terms lack definition*

Descriptions for Intercultural understanding, Ethical behaviour and Personal and social competence require specialist curriculum knowledge. Many technical terms, such as “ethical principles” or “intercultural encounters”, may not be familiar or have a common understanding.

#### **Way forward**

Consider using more generic terms or provide a glossary.

### 3.6 *Lack of detail for Foundation to Year 2*

Further detail is needed in Foundation to Year 2 for all general capabilities. This is a three-year period considered essential for the introduction and development of general capabilities.



**Way forward**

Provide further information, clarity and detail for Foundation to Year 2.

### **3.7 Lack of consideration about Prior to Foundation**

Consideration must also be given to providing Prior to Foundation general capabilities information. This should be done in the development stage, not as a “bolt on”.

**Way forward**

Provide further information, clarity and detail about Prior to Foundation.

## **4. Interpreting assessment messages and the general capabilities**

### **4.1 Lack of clarity and information on link to assessment**

Information about assessment and the general capabilities is unclear and possibly contradictory. While they are “not intended as tools for assessment”, teachers are still “expected to teach and assess general capabilities as they are incorporated within each learning area”. Queensland educators generally felt that the assessment of the general capabilities is problematic for various reasons.

- Many educators who assumed that the capability is built-in enquired, “If I am assessing the content description, am I assessing the tagged general capability by default?”
- Some educators expressed a desire for a summative approach, although across all general capabilities at all junctures this would be difficult, complex, as well as onerous for teachers. Further, it was unclear how summative assessment of a capability could occur if there is no description at the year level for all general capabilities.

There was overwhelming feedback about the lack of teacher knowledge and understanding of the general capabilities, and the need for further resources and materials to enhance understanding. Based on this feedback, many felt that any decisions about assessment should focus on a formative monitoring process which is likely to be more accessible and achievable.

**Way forward**

- Clarify statements about assessment. Consider promoting an assessment for learning or monitoring approach.
- Clarify the relationship between the general capabilities and content descriptions.

## **5. The role of the theoretical frameworks**

### **5.1 Inappropriately named theoretical framework**

While the information placed under the heading “Theoretical framework” is of interest and is generally a balanced overview of recent research, it is not a framework that specifically explains or guides how the continua were developed and theoretically positioned. The information is more like a literature search of significant research about each capability.

### Way forward

- Rename as “Theoretical background”.
- Include a “framework” that describes the common thread or theoretical position that informs the general capabilities descriptions.

## 5.2 *Privileging of research*

The privileging of specific research was raised. For example, the work of:

- Robert J Sternberg, Edward de Bono and Ken Robinson could be included in Critical and creative thinking
- Vince Geiger, Merrillyn Goos and Lynn Arthur Steen could be included in Numeracy
- Claire Wyatt-Smith could be included in Literacy.

The QSA can provide suggested references for further consideration.

### Way forward

- Seek suggestions for further academic research, including research about disability and the general capabilities.
- Provide detail in a supplementary resource about how theory has been applied to the continua.

## 6. The two-year juncture models across the continua

### 6.1 *General capabilities do not link to junctures*

Most feedback favoured a two-year juncture for all general capabilities to encourage all teachers to have close access to the descriptions.

### Way forward

Write all general capabilities in two-year junctures.

### 6.2 *Lack of consideration for a Prior to Foundation juncture*

Special education feedback supports a Prior to Foundation juncture. Given the work that is being undertaken to support the learning of all children, the general capabilities for Prior to Foundation should be developed now rather than being “bolted on” later.

### Way forward

Include general capabilities for a By the end of Foundation juncture.

## 7. Aboriginal and Torres Strait Islander perspectives

### 7.1 *Lack of Aboriginal and Torres Strait Islander voice*

Feedback from Aboriginal and Torres Strait Islander educators noted the lack of “voice” through all of the general capabilities. There is potential to embed the cross-curriculum priority purposefully across the general capabilities.

### Way forward

- Focus on “community” through the general capabilities. For example, “community” could be central to the model for Personal and social competence and Ethical behaviour.
- Include Indigenous ideas and examples when describing elements within the general capabilities
- Include related Indigenous research and thinking within the “Theoretical framework” information and references.

## 8. Special education considerations

### 8.1 *Inclusive language is not prioritised*

Educators were concerned about a “bolt-on” approach to considering the needs of special education students through both the learning area content descriptions and now the general capabilities. This is not in keeping with Goal 1 of the *Melbourne Declaration on Educational Goals for Young Australians*.

Educators raised issues such as prioritising the use of inclusive language throughout ACARA documents. For example:

- Literacy: By the end of Year 2 uses:  
“*Listen* for ...; use *talk* as a key learning tool ...; *speak* clearly using appropriate volume, pace and pitch; *listen* to, *read* and *view* ...”
- Numeracy: By the end of Year 2 uses:  
“*Read, write* ...”

ACARA needs to work to ensure that the language used within the Australian Curriculum and all supporting documents is inclusive rather than restrictive. For example, include signing, Braille, and alternative/augmentative communication.

Queensland educators planning for and teaching the general capabilities within learning area programs across the years of schooling will value advice and examples of how to support students with special education needs.

### Way forward

- Ensure language is inclusive in all documents.
- Provide advice to assist teachers to support students with special education needs.

### 8.2 *Lack of a By the end of Foundation juncture*

As content descriptions for students with special education needs are in development, a By the end of Foundation juncture to parallel the learning area should also be developed. This juncture point should include descriptions for all general capabilities.

### Way forward

- Provide general capabilities descriptions within a By the end of Foundation juncture.

## 9. Language terminology, format, consistency of descriptions

### 9.1 *Lack of consistency in description detail*

Perhaps due to the mix of skills, competencies, behaviours and attitudes the capability descriptions change in grain size, pitch and are written differently.

- Some descriptions are very explicit and clear. For example:  
“Students use ICT effectively to record ideas, represent their thinking and plan solutions”.
- Some descriptions are quite vague and require elaboration. For example:  
“They select and apply appropriate software functions and use basic troubleshooting procedures to solve routine malfunctions”.

If teachers cannot understand the general capabilities they will not be included in planning purposefully. General capabilities, by their definition, should be accessible to all.

#### **Way forward**

- Use common curriculum terms and fewer technical terms to improve access and use of the documents.
- Review the detail in the general capabilities to be more consistent.

### 9.2 *Progression of concept not visible across descriptions*

Similar capability descriptions should line up horizontally based on their underpinning concepts. This will allow teachers to see the progression of the same concept across the junctures as described through the capability descriptions.

#### **Way forward**

Show alignment of capability descriptions across the junctures. For example, use a grid to ensure similar descriptions can be read across the junctures.

### 9.3 *Special education terminology not provided*

Special education feedback noted the absence of terminology, for example signing, Braille, alternative/augmentative communication, in examples within the general capabilities.

#### **Way forward**

Include special education terminology where appropriate. For example, use terminology when describing the elements within the general capabilities, as well as in the pop-up boxes.

### 9.4 *Inconsistency in language, style, tone and message*

The Elements of Literacy section and the Elements of Numeracy section have a different language, style, tone and message:

- Elements of Literacy uses “students learn” or “students comprehend”
- Elements of Numeracy uses “as students progress from”.

ACARA has indicated that Literacy and Numeracy have a higher degree of similarity than the other general capabilities, but this difference in style and text may not assist teachers’ understanding.

**Way forward**

- Check for consistency of language, style, tone and message across the general capabilities.
- Use preferred text — “as students progress from Prior to Foundation to Year 10” — as this reinforces the idea that it is a gradual process over a number of years.

## 9.5 *Inconsistency and imprecision in terminology*

The term “descriptions” is used interchangeably and unnecessarily. There are “content descriptions” and also “capability descriptions”. A common term does not support differentiation of these two aspects of the curriculum.

**Way forward**

Consider renaming “capability descriptions” to simply “general capabilities”.

## 10. Levelness of capability descriptions

### 10.1 *Inconsistency in cognitive demand*

The cognitive demand for students at juncture levels for the general capabilities is not consistent. The mix of skills, behaviours, competencies and attitudes make this difficult but cognitive demand must be considered, especially if assessment of the general capabilities is promoted.

**Way forward**

Reassess the consistency of cognitive levelness of descriptions at juncture levels.

## 11. Resourcing to support the general capabilities

### 11.1 *Lack of resources to support teachers*

Queensland provides a breadth and depth of resources to support literacy and numeracy development. There is a concern that for many of the other general capabilities, such as Ethical behaviour and Intercultural understanding, there is a lack of resources available to support teachers.

**Way forward**

- Make clear the links between the general capabilities descriptions and learning areas content descriptions.
- Provide background information for all general capabilities in relation to early years, upper primary, lower secondary and upper secondary junctures.

## 12. Year 12 juncture messages

### 12.1 *Lack of information about senior years of schooling*

There is a lack of information about the general capabilities and the senior years of schooling beyond Year 10.

#### **Way forward**

Provide statements indicating the intent to develop general capability descriptions up to and inclusive of the senior years of schooling.

# Analysis of the general capabilities

## Literacy

### *Strengths*

- In the main, the document is informed by significant literature from the field, and the theoretical background is summarised effectively for the document's purpose.
- The theoretical framework section, although not a theoretical framework, refers to a balanced and satisfactory range of theoretical positions. The argument could be tighter but it takes a balanced approach, which is important. The single reference to Maureen Walsh on the multimodal elements of literacy is insufficient.
- The conceptual statement and the continuum are a potentially useful tool for teachers, providing purpose and direction to planning and teaching, and support for monitoring student learning.
- As the development of literacy knowledge involves very finely grained skills, the use of two-year bands (after Year 2) to describe knowledge and skills is supported.

### *Concerns and issues*

#### Introduction

- The idea that individuals engage with texts of different modes is highlighted. However, what is lost is that the texts that students engage with are increasingly multimodal. It is not that students have to engage with print, visual, and audio texts, but that they engage with texts that incorporate all of these modes and more. It is important that literacy must address the increasing multimodality of texts in society.
- The second line on in the first paragraph of the Introduction — “communicate confidently” needs to be changed to “effectively”. A student can be very confident but not communicate well, or a student can communicate but lack confidence for all sorts of other reasons.

#### Scope of Literacy

- The scope displays slippage between foregrounding literacy as “skills” and trying to take a broader notion of literacy “knowledge, skills, and understandings” (with the plural being very important). Literacy is much more than a repertoire of skills. The notion of literacy being skills, understandings and processes must be foregrounded. An alternative would be to use the term “literacy practices”.
- A sharper distinction between the English learning area and the Literacy general capability is needed, particularly distinguishing between language and literacy.
- The structure primarily promotes formal grammar. Being literate requires more than the ability to correctly use formal grammar; being literate requires proficiency in the full range of literacy competencies — coding, semantic, pragmatic and critical — as outlined in Peter Freebody's and Allan Luke's “Four Resources Model” (1990).  
See: [www.readingonline.org/research/lukefreebody.html#freebody](http://www.readingonline.org/research/lukefreebody.html#freebody)

## Elements of Literacy

- The model indicates that there are two major elements with four sub-elements that relate to both. The continuum represents six discrete elements. The relationship is unclear.
- There is repetition between the two elements Comprehending texts through listening, viewing and reading and Composing of texts through speaking, writing and creating and the four sub-elements which also include comprehension and composition of text.
  - The sub-element of Text features and grammar relates to traditional grammar and its pursuit of traditional parts of speech and rules of syntax. It does not make explicit an alternative grammar which would align with the Australian Curriculum: English and its focus on language in use and engagement with meaning and context. Both approaches must be explicit. Reference to field, tenor and mode is necessary.
  - The four sub-elements seem to be arbitrary selections — they do not cover all the important concepts. They must either provide fuller coverage or not be included. Including Word knowledge and Visual knowledge seems especially problematic as it begs the question — why not audio, gestural, and digital as well? Using the two major elements only would be appropriate. Another approach could be using Text purposes and structures and Text features and grammar.
  - To gain visual knowledge, students must learn how text and image work together to convey meaning.
- Aspects of critical literacy (text and context) should be given increased prominence.
- Notions of creativity and entertainment should be included within the elements and descriptions.
- Literacy across the curriculum must be highlighted as an important issue, not as an add-on.
  - Literacy in learning areas other than English encompasses more than topic knowledge and its associated vocabulary, with the elements of Comprehending texts through listening, viewing and reading and Composing texts through speaking, writing and creating critical to successful planning and teaching.
  - Clarity can be increased with more specific references and examples about the place of literacy in the learning areas. For example, if teachers of mathematics do not know that some of these elements apply within their learning area, there is nothing that points them to the relevance for their learning area.
- Technical words, such as “text” and “modality” share meanings with common everyday words. The specificity of terminology needs careful unpacking.

## Literacy continuum

- In the introduction to the continuum, expectations for the teaching of literacy skills in English and their use to understand content and application in other learning areas are described in an inconsistent way. For example, “knowledge, skills and dispositions” is used interchangeably with “skills” or “knowledge and skills”.
- Clarification is required about the statement:

“The continuum also takes into account a possible delay between students acquiring particular literacy skills in English and applying those skills in other learning areas”.
- In the Text features and grammar descriptions, the continuum sets up the idea that grammatically complex sentences are the goal, whereas in academic writing the goal is to compose grammatically simple sentences that draw on sophisticated lexical terms.



- The general capability descriptions seem too similar to the English learning area content descriptions to have any purpose. It is likely to encourage teachers of other disciplines to ignore their responsibility as teachers of literacy because in this form the general capabilities look so much like English.
- A consistent focus on the development of literacy knowledge and skills should occur in the continuum. In some descriptions, pedagogical practices are included rather than observable practices that capture the development of literacy knowledge and skills. For example, “Students read, with support and preparation, texts outside their personal, social and cultural contexts”.
- The continuum should be comprehensive and inclusive of all expected learning. In the Foundation to Year 2 band the essential knowledge and skills (phonetics, oral language, spelling and handwriting) should be included. This knowledge and these skills are critical to other learning and should be explicit.
- More detail about skills development in reading and writing is needed.
- Year 6 does not mention literal and inferential comprehension.

### Way forward

#### Conceptual statement

- Provide a sharper distinction between literacy as an organiser, literacy as a capability and literacy as an aspect of national testing.
- Consider using the term “literacy practices” rather than “skills”.
- Consider the phrase “literacy in the curriculum” rather than “literacy across the curriculum” as it is dynamic to each learning area.
- Provide greater elaboration on how literacy knowledge and skills can be developed in learning areas other than English at juncture levels.
- Change “communicate confidently” (in the second line) to “communicate effectively”.
- Reconsider the model and the relationship between the six elements. Consider using only Comprehending texts through listening, viewing and reading and Composing texts through speaking, writing and creating as elements within which concepts can be grouped.
- Include greater clarification and more detailed advice and direction about the essential role that Literacy has in the phase Foundation to Year 2, as development of literacy and numeracy is critical in this phase. For example, emphasise the role of Literacy in the learning areas and include descriptions of knowledge and skills in each year in the phase.
- Provide clarity about how teachers in learning areas other than English can use the Literacy conceptual statement and continuum to inform planning and teaching.
- Minimise unnecessary terminology which may limit engagement by teachers of learning areas other than English.
- Include notions of creativity and entertainment within the elements.
- Include critical literacy as one of the four interrelated foundations of being literate (see the work of Allan Luke and Peter Freebody<sup>1</sup>).
- Ensure language is inclusive to ensure access for students with a disability.
- Consider integrating Aboriginal and Torres Strait Islander contexts and examples into descriptions of elements where appropriate.

#### Continuum

- Introduce a By the end of Foundation juncture for the Literacy general capability to cater for students with a disability. This is a key equity issue.
- Review the knowledge, skills and dispositions to better focus on 21st-century communication rather than the current focus on traditional communication and print text.
- Signal new knowledge, skills and dispositions when they appear for the first time in the

<sup>1</sup> A discussion of Luke and Freebody's work on critical literacy can be found on the Tasmanian Department of Education's website, accessed 15 Sep 2011, <http://www.education.tas.gov.au/curriculum/standards/english/english/teachers/critlit>.

## Way forward

continuum and explain why some drop off.

- Sequence and organise the bullet points for each element to enable teachers to see a logical progression of knowledge, skills and dispositions across the junctures. For example, use a grid and put all the listening descriptions across the same line.
- Explain how the continuum “ ... takes into account a possible delay between students acquiring particular skills in English and applying those skills in other areas”.

## Editorial suggestions

- In By the end of Year 2 (Comprehending texts through listening, viewing and reading):
  - align the metalanguage used between the Comprehending skill and the Literacy strand of the English curriculum for Interpreting, analysing, evaluating
  - include the necessary skills of “cross-checking and reviewing” which is in the English Literacy strand.
- In By the end of Year 2 (Text purposes and structures):
  - clarify the description: “ ... listen to, read and view less predictable, imaginative, informative and persuasive text with familiar structures” (first bullet point). This statement is ambiguous and suggests that children be exposed to “less” of all of these texts. Consider using: “ ... listen to, read and view imaginative, informative and persuasive texts with familiar structures, including those that are less predictable”.
- In By the end of Year 10 (Composing texts through speaking, writing and creating):
  - add a reference to online discussion groups and forums to “ ... participate productively in oral discussions ... ” (fourth bullet point).

## Links to learning areas

- Ensure tagging is explicit: the capability must be clearly identifiable with a content description within the pop-up box.
- Explain that the tags are examples only.

# Numeracy

## Strengths

- The conceptual statement builds teacher engagement with the Elements of Numeracy, makes connections with learning areas, and promotes the Numeracy general capability in the curriculum.
- The statement is clear and concise, articulating a clear message about students developing and applying numeracy skills in a range of life roles.
- The conceptual statement and continuum are inclusive of a broad range of Numeracy skills, including financial literacy contexts and skills.
- Connections between Numeracy and the Mathematics learning area are clearly evident.
- The statement encourages the teaching of mathematic concepts across the curriculum to develop students' numeracy skills.
- Key terms are used appropriately and consistently.
- The theoretical framework provides an overview of significant research.
- The organisation of the continuum is accessible, clear and concise.

## Concerns and issues

### Conceptual statement

- While mathematical knowledge and contexts are identified as dimensions of numeracy there is little or no reference to other elements such as student dispositions and the use of tools (including digital tools) in numerate practice.
- The scope refers only to constructs built around mathematical knowledge and does not incorporate other elements such as context, dispositions or tools.

### Learning areas

- It is not clear how to support Numeracy as a general capability and teach numeracy within the Australian Curriculum: Mathematics.
- It is unlikely that teachers in learning areas other than Mathematics will be able to deliver the suggestions in Numeracy across the curriculum, unless each is exemplified clearly. For example, how does the Arts teacher:  
“ ... identify the specific numeracy demands and opportunities of their learning area ...”?  
Teachers will need specific information to ensure consistency of understanding.

### Theoretical framework

- There is no reference to the practice or research literature related to mathematical modelling and applications.
- The theoretical framework makes reference to significant numeracy research, although it is a little dated. Additional references are listed in Appendix A.
- There is no theoretical connection with Aboriginal and Torres Strait Islander learning of numeracy and mathematics.

## Elements of Numeracy

- The elements are very mathematical in nature and devoid of real-world contexts which are implied in the conceptual statement.
- The examples cited are not particularly strong. For example, under Using patterns and relationships the relationship between earthquakes and tsunamis is cited. It is difficult to interpret what sort of mathematical relationship the writers are intending here. The examples of mathematics in context need to be more targeted and obvious. For example, consider providing a reference to the use of statistics to identify and assist in understanding social and environmental issues.
- Use of mathematical terms and language sends an inappropriate signal to teachers that numeracy is the responsibility of teachers of mathematics rather than the responsibility of all teachers.
- The voice and consideration of Aboriginal and Torres Strait Islander peoples and students with special education needs are not obvious within the examples.

## Numeracy continuum

- The continuum refers to “knowledge, skills and dispositions”. The conceptual statement refers to “skills” and then “dispositions” and “capacities”. Clarity is needed.
- Teachers with deep knowledge of mathematics and numeracy will find the continuum more useful and accessible than non-mathematics teachers. This is because of the specific mathematical terminology used throughout. For example:  
“ ... predicted frequencies of chance experiments”.
- Stronger emphasis is needed in Foundation to Year 2 on the language and literacy inherent in mathematics and numeracy as a precondition for students developing numeracy skills. More detailed advice and direction about numeracy and descriptions of knowledge and skills are needed in each year of the phase Foundation to Year 2 as development of numeracy is critical at this time.
- There are no general capabilities for Prior to Foundation. Detailed advice and direction about numeracy and descriptions of knowledge and skills are needed in each level of the band By the end of Foundation.
- The telling time descriptions do not specify analog or digital or both. Teachers are unsure if this is important and have reflected on the alignment of these descriptions against the Mathematics learning area content descriptions.
- More emphasis is required on written strategies for By the end of Year 6 as this is a particular problem for students entering high school.
- Knowing about number should also include a focus on the portioning of numbers.

### Way forward

#### Conceptual statement

- Update the theoretical literature with more recent research.
- Develop a framework that shows the rationale or reasoning behind the continuum.
- Build in a “futures orientation”.
- Limit the use of mathematical terms or provide a glossary and examples.

#### Continuum

- Introduce a By the end of Foundation juncture to provide more explicit detail for teachers working at a Prior to Foundation level. This is a key equity issue.
- Consider the use of general pedagogical language in the continuum to signal to teachers

## Way forward

that numeracy is the responsibility of all teachers.

- Ensure examples within the elements are transparent for teachers of learning areas other than Mathematics.
- Include examples of numeracy in all learning areas (where appropriate) at juncture points.
- Include the language of the mathematical proficiencies within the continuum.
- Review the continuum to de-emphasise mathematical knowledge and skills and emphasise other essential elements of numeracy such as positive dispositions, critical orientation and use of tools.
- Ensure language is inclusive to ensure access for students with a disability.
- Consider integrating Aboriginal and Torres Strait Islander contexts and examples into descriptions of elements where appropriate.
- Ensure alignment to Mathematics learning area content descriptions. Explain if there is a “delay” as in Literacy.
- Include more explicit detail for teachers in the early years.

### Editorial suggestions

- In By the end of Year 2 (Interpreting and drawing conclusions from statistical information):
  - The wording of the first bullet point constructs a confusing statement: “ ... identify an issue or question of interest based on one categorical variable”. This point needs to have its intended meaning clearly stated. By the end of Year 4 uses the language “ ... organise data into categories ... ” which is easier to understand.
- In By the end of Year 10 (Interpreting and drawing conclusions from statistical information):
  - This element needs to include the skills of “evaluating the reliability and validity of data”. This could be included in the bullet point starting with “ ... evaluate statistical reports ... ”

### Links to learning areas

- Ensure tagging is explicit: the capability must be clearly identifiable with a content description within the pop-up box.
- Explain that the tags are examples only.

# Information and communication technology (ICT) competence

## *Strengths*

- The scope and theoretical framework for Information and communication technology (ICT) competence is well explained with the interrelatedness between the elements made clearly and succinctly.
- The description of the link between ICT capability to workforce needs and contemporary society is excellent.
- Inclusion of the sentence schools “ ... need to increase their effectiveness significantly over the next decade ... ” is relevant and a very important message.
- The diagram used to demonstrate the relationship between the elements is clear and easy to interpret.
- There is overall agreement that all elements are appropriate.

## *Concerns and issues*

### **Conceptual statement**

- The word “competence” within the title implies that the emphasis within this general capability is about operational or technical skills as opposed to knowledge and understanding.
- The capability is described in terms of “knowledge” and “skills” and later “understandings”.
- The “futures orientation” needs to be emphasised through the continuum.

### **Scope of ICT**

- The use of the term “limitations” in the final sentence of the introductory paragraph is a narrow interpretation and implies a negative effect of technology.
- Information about adaptive and assistive technologies appears to be missing from this capability. It would easily fit under the element of Managing and operating ICT:  
“Selecting appropriate hardware and software from a range with increasing scope to match the needs of the user and the task”.
- The use of web 2.0 technologies is the foundation of most effective ICT practices in the last three years. These are not outlined in any clear way.
- Being secure with ICT needs to be highlighted. There is potential to make this a distinct element.
- Within the element of Managing and operating ICT the wording is not developmental enough. For example, “select” and “identify” are terms that do not really show development as they are synonymous with each other.
- The element of Investigating with ICT will be possibly an unrealistic stretch in Foundation and Year 1, which will mean this element would have to be fully completed in Year 2.

- Collaboration should be an element in its own right. Collaborating and the skills it involves is more than just the traditional understanding of “communicating”. It involves sharing work practice, reflecting, meaning making and co-constructing in relation to others. The ubiquitous use of technology allows this to happen. The goals of the *Melbourne Declaration on Educational Goals for Young Australians* indicate that the ability to collaborate is a key requirement for our current and future society. Collaborating is a clear characteristic of contemporary learning. How we actually communicate things in our world through, for example, social media and co-construct meaning is through collaboration. If our world is about shared spaces and shared meaning we need to ensure that this is reflected clearly within the ICT capability.
- The theoretical framework needs to have more clarity about its key message for teachers as the theoretical underpinning for this general capability is not sufficiently evident.

## Learning areas

- It is necessary to show where and how ICT can be taught in a range of learning areas at different junctures.

## ICT continuum

- The descriptions are statements too open to interpretation or too generic and do not provide teachers with sufficient guidance. For example:
  - In By the end of Year 2 (Creating with ICT):
 

“They use the basic functionality of limited software to experiment with manipulating different data types such as text, images (still and moving), audio and numbers”.

The word “limited” may restrict teachers’ thinking in terms of planning for and providing learning opportunities. “Limiting” applications does not reflect the contemporary nature of integration with applications.
  - In By the end of Year 6 (Creating with ICT):
 

“They create ICT solutions, independently or collaboratively, for particular audiences and purposes, and use a range of software types and functions to edit a range of data types such as text, images (still and moving), audio and numbers”.
- Productive examples are required to clarify teacher understanding and expectation. Exemplars are required.
- Two-year junctures would provide teachers with greater clarity about the expectations for students.
- Some terms need clarification within the descriptions. For example, “limitations”.
- The term “routine malfunctions” infers that the ICT is the problem when, in reality, it tends to be the user.
- In By the end of Year 6 (Communicating with ICT), consider revising the description:
 

“They independently establish secure accounts for approved online environments”.

This would not be possible in the majority of Queensland schools. Generally in schools, students will use learning management systems (LMS) and online spaces that have been set up by staff for the reasons of duty of care. Perhaps replace “independently establish” with “use” or “maintain”.
- In By the end of Year 2, 6 and 10, the reference to “numbers” is confusing and unclear.

## Way forward

### Conceptual statement

- Consider removing the word “competence” from the title so it becomes simply “Information and communication technology” or replace competence with the term “fluency”, “capability” or “practice”. The Literacy and Numeracy general capabilities do not include a modifier. Therefore, the final sentence in the Conceptual statement could read as: “The ICT conceptual statement and continuum describe the nature, scope and sequence of learning for ICT fluency/practice/capability in the Australian Curriculum”.
- Add “globally connected and networked communities” as examples of the importance for ICT understanding or competence.
- Include adaptive and assistive technologies when listing examples of ICTs.

### Continuum

- Introduce a By the end of Foundation juncture for the ICT general capability to cater for students with a disability. This is a key equity issue.
- Develop a two-year juncture model.
- Make explicit the following statement: “It is also important for teachers to look back at previous junctures as these expectations are not included in the expectations for later junctures”.
- Make descriptions more specific to enable teachers across the curriculum to deliver this general capability.
- Provide exemplars to support interpretation of descriptions.
- Provide more explicit detail for teachers in the early years and for those assisting students working at a Prior to Foundation level.
- Review to include inclusive language to ensure access for students with a disability.
- Consider integrating Aboriginal and Torres Strait Islander contexts and examples into descriptions of elements where appropriate.

### Editorial suggestions

- Scope: Include “limitations, possibilities and extended functionalities” in the final sentence.
- First bullet point (social and ethical): Include “Apply appropriate social and ethical protocols and practices in managing and operating, communicating and investigating ICT”.
- Information and communication technology (ICT) competence across the curriculum: Make the final sentence the first sentence:  
“Students apply technical knowledge and skills and appropriate social and ethical protocols and practices to investigate, create and communicate and develop skills in managing and operating ICT. Students develop and apply skills in investigating with ICT across all learning areas. They use ICT to access data and information from a range of primary and secondary sources when investigating questions topics or problems. Students use ICT to create responses and solutions to challenges or problems, developing skills in creating with ICT, and use ICT to communicate ideas and information to others, considering purpose, audience and technology, developing skills in communicating with ICT.”
- Across the continuum for each year level (i.e. By the end of Year 2, 6 and 10) the following words are used “ ... such as text, images (still and moving), audio and numbers.” The reference to “numbers” is confusing and unclear. Use the term “numerical data” if this is meant to refer to the use of formulas in spreadsheets.

### Suggested inclusions

- In Applying social and ethical protocols and practices when using ICT, consider including:
  - understanding the responsibilities of online actions. For example, when blogging and uploading images



## Way forward

- being aware of “grooming” or “luring”, cyberstalking and identity theft
- recognising ICT competence as an integral tool of an active and informed citizen
- recognising how the internet and other tools are used to provide information, to gather and sort information, and advocate and inform others
- describing students responsibilities as digital citizens when referring to social networking sites.
- In Managing and operating ICT, consider including:
  - using generic file and software functions such as opening and saving files in given locations, resizing images, copying and pasting text, naming and organising or managing files, file formats, security and backing up of files and data
  - navigating software and virtual environments
  - understanding the purpose of databases and using these to organise, store and retrieve data
  - using electronic organisers and online calendars to plan and develop a schedule.
- In Investigating with ICT, consider including:
  - accessing tertiary resources
  - accessing online experts and online learning
  - using social networking environments and online communication tools including blogs, wikis and forums to build an information community as a shared resource
  - understanding that using ICT can enable broader inquiry, enabling access to a wide variety of information, opinions and perspectives.
- In Creating with ICT, consider including:
  - creating and sharing innovative and original digital products
  - selecting and using ICT to create a range of products to suit the purpose and audience.
- In Communicating with ICT, consider including:
  - collaborating, collectively contributing to and creating products, such as using wiki project management tools, file management, online documents, and interactive whiteboard software
  - collaborating locally and globally and distributing information, exchanging ideas, and influencing public opinion and behaviour
  - reflecting on the use of ICT and identifying ways to improve the effectiveness of communication.

### Links to learning areas

- Ensure tagging is explicit: the capability must be clearly identifiable with a content description within the pop-up box.
- Explain that the tags are examples only.
- Provide detailed exemplars that demonstrate the use of ICTs in all learning areas at different juncture levels.

## Critical and creative thinking

### Strengths

- This capability is highly valued by Queensland educators.
- The metacognition aspects are valued.
- It is a capability that can be applied across all learning areas and at all junctures.
- The theoretical base is supported.

### Concerns and issues

#### Conceptual statement

- Participants expressed concern with the idea that mastery is expressed through a sequence of implied thinking skills.
- In paragraph 3, reference is made to a sequence of thinking skills, but the sequence of thinking skills is not explained:  
“By applying a sequence of thinking skills, students develop an increasingly sophisticated understanding of the processes ...”

#### Scope and elements of Critical and creative thinking

- There is a lot of jargon that is open to different interpretations. For example, “intellectual flexibility”.
- There needs to be a place for creative ideas and production and students need to develop skills for developing and evaluating the “new”.
- “Divergent thinking” and “futures thinking” should be embedded within the scope.
- While creative thinking is valued there has been considerable debate as to whether it should stand alone or be seen as part of critical thinking. Essentially, critical thinking is an ongoing activity: examining information to determine its reliability, relevance and implications. Creative thinking is an element of this activity, whereby new ideas or hypotheses are generated. The new ideas should then be analysed, tested and evaluated as part of the critical thinking process. A critical thinker does not value innovation for its own sake but rather fashions new ideas to solve novel and complex problems and then evaluates those ideas in light of new evidence. Creative thinking is merely one aspect of the way in which a critical thinker engages with their changing environment.
- The approach described in paragraph 5 (“Critical and creative thinking can be encouraged simultaneously ...”) overemphasises creative thinking and neglects to mention the need to critically examine ideas or information that arise from “a burst of creative energy”. It describes a process which culminates in an “innovative response”. In practice, this approach is likely to result in students and teachers devoting a disproportionate amount of energy to the creative thinking component, perceived by students and many teachers as “the fun part”, with only a token nod to the other elements of critical thinking which is perceived as the “difficult or boring part”.
- Critical thinking involves the development of specific knowledge, such as how to recognise particular argument types or common fallacies, or how to evaluate a

hypothesis, whereas facilitating creative thinking as a stand-alone mode of thought involves exposing the students to new procedures and techniques for generating ideas. Critical thinking has a significant theoretical component without which the ideas generated through isolated creative thinking are not subject to meaningful evaluation.

- In asserting creative thinking as a distinct mode of thinking, the overarching importance of critical thinking is lost and it becomes merely a precursor to the "burst of creative energy". A more appropriate description of the critical thinking process would be "... thinking through possible solutions, then formulating a test of possible solutions to produce a well-supported, reasoned response". It should be noted that the critical thinking process does not end — it is a cycle that continues as new information which may be the result of creative thinking comes to light.
- The four interrelated elements are a good description of the critical thinking process. However, the following comments were made by participants about the elements.
  - The explication of each element does not clarify the distinctions between the elements. For example, "evaluating" appears in elements 2 and 3; "suspending judgment" seems more relevant to element 2 than element 4. For clarity, the explications of each of the elements should be removed.
  - There is no need to specify "seeking innovative solutions" in element 2, as element 2 "Generating and developing ideas and possibilities" is the creative component of the critical thinking process.
  - Analysing, evaluating and synthesising (element 3) does not involve creative processes — indeed drawing a conclusion through a creative process can be the opposite of drawing a conclusion through a logical or, more correctly, a rational process.
  - The elements as presented can appear as a process that teachers might use for planning. However, the order of the four elements may limit the quality of ideation if it is attempted too early in the process. Element 2 should appear after the current element 3. The four elements would be better at the beginning of this section.
  - The elements should be reflected as part of an iterative process.
  - The thinking processes, skills and knowledge for Analysing, evaluating and synthesising information and Reflecting on thinking, actions and processes need to be articulated either in the conceptual statement or the continuum.
- Reference is made to thinking processes (metacognition) but it is not clear that these skills will be taught explicitly.
- More direction on the substance of "feedback" and the manner of its delivery should be provided.

### Across the curriculum

- The explicit teaching of critical thinking is necessary if students are to be able to employ a range of reasoning skills across a range of contexts. However, it is not clear when and where this explicit teaching is going to occur. The instances of critical thinking identified in the learning area content descriptions are opportunities for critical thinking skills to be employed, but there appears to be an assumption that these skills will be developed incidentally during the course of other studies.
- The online Australian Curriculum filter for general capabilities identifies opportunities where critical and creative thinking can be taught. However, this does not provide advice about teaching a planned sequence of skills and processes. The tag to the content

description needs to indicate a possible aspect or aspects of critical and creative thinking that could be included.

- The Australian Curriculum provides limited direction about the teaching of critical thinking skills. Simply stating that critical and creative thinking is embedded does not help teachers plan for and teach critical and creative thinking. Teachers may not be trained in the skills and teaching of critical thinking so the metacognition should be made explicit.
- The descriptions do not acknowledge the power of creative thinking.
- Writers developing Phase 2 and 3 of the Australian Curriculum must use the continuum and provide clearer direction on how critical and creative thinking is developed across the curriculum.

### Theoretical framework

- Key authors have been identified, but reference to Howard Gardner's Frames of Mind was not visible in the continuum. A stronger reference to Art Costa's Habits of Mind, including language, may have shown closer ties to creative thinking. Similarly Ken Robinson's work on divergent thinking could be included.
- The connection between this and the other general capabilities is absent.

### Continuum

- There needs to be more detail as to precisely what students are expected to know and be able to do, both in the continuum and in the learning area content descriptions. For example:
  - in By the end of Year 6 (Analysing, evaluating and synthesising information) there is no indication in any of the learning area content descriptions or elaborations that students will learn, by the end of Year 6, what logical relationships may exist between propositions or how to use logical reasoning to test propositions. There is no mention of essential concepts such as the distinction between deductive (logical) reasoning and inductive reasoning, necessary and sufficient conditions, valid and invalid and sound and unsound arguments, and hidden premises.
  - in the continuum there are references to "logic", "logical reasoning" and "logical and abstract thinking" at the Year 10 juncture in the first three elements. By the end of Year 10, students are to be able to identify faulty reasoning (Analysing, evaluating and synthesising information). Yet nowhere in the learning area content descriptions is it clear that the students are going to learn about common fallacies (mistakes in reasoning) such as hasty generalisation, faulty analogy, argumentum ad hominem and affirming the consequent. Without the explicit teaching of these concepts as foreshadowed in the conceptual statement, students will not be equipped with the knowledge or the vocabulary to be able to articulate the understandings expected in the continuum.
- The use of words such as "can" and "are able to" within the general capability descriptions are potentially exclusive. While special educators are comfortable with the concepts they are concerned that this may mislead some beginning teachers to substitute capability for actual demonstrated achievement. For example, in the By the end of Year 2 section (Inquiring — identifying, exploring and clarifying information) consider using "Students access meaning by ..." rather than the current "Students are able to access meaning ..."
- The general capability remains very general and uninformative in the continuum descriptions. Teachers require practical examples of what inquiring, generating,

analysing and reflecting look like across the learning areas to understand the expectations within their learning area. For example, comprehension programs, maths investigations, historical debates, inventions, learning lessons from the past.

- Reference is made to critical and creative thinking being encouraged through activities, but related skills are not explicit in the conceptual statement or the continuum.
- Little will be achieved without the use of clear statements to describe the process of critical thinking. Definitions of terms can be found in many critical and creative thinking courses. Filtering the Science, English, Mathematics or History curriculum by the general capability of Critical and creative thinking provides standard curriculum experiences and content only.
- There is much made of what the students will be able to do in broad terms, but there is no precise language or system of critical and creative thinking that could be used as a guide for teachers or for the explicit thinking skills that students will be able to use, verbalise or reflect upon. Creating critical thinkers, in particular, demands this type of specificity in the document.
- In By the end of Year 2, participants questioned whether a student at this age is able to:  
“ ... summarise points and transfer knowledge to new contexts when problem solving”.

Transference of knowledge and skills to other contexts is desirable but this is a skill in early development at this age.

### Way forward

#### Conceptual statement

- Avoid the use of jargon, broad statements and claims that are questionable or open to broad interpretation, such as claims about “a burst of creative energy”.
- Reconsider the relationship between creative and critical thinking and how this is evidenced through the elements and the continuum.
- Minimise and delineate the descriptions of the “interrelated processes or elements”.
- Consider describing the processes as an iterative process.
- Provide further information about “effective feedback”.
- Broaden the theoretical information to include divergent thinking. Consider the work of Edward de Bono, Ken Robinson, Robert J Sternberg, James C Kaufmann, Michael Hewitt-Gleeson.

#### Continuum

- Introduce a By the end of Foundation juncture for the general capability to cater for students with a disability. This is a key equity issue.
- Introduce a two-year juncture continuum.
- Ensure the wording of the general capability descriptions allow teachers to gather evidence that demonstrates student achievement of the capability, not just potential to achieve.
- Describe thinking skills, thinking processes, thinking strategies and the elements or processes more clearly.
- Provide more explicit detail for teachers in the early years and for those assisting students working at a Prior to Foundation level.
- Ensure language is inclusive to ensure access for students with a disability.
- Signal new knowledge, skills and dispositions when they appear for the first time in the continuum and explain why some drop off.
- Sequence and organise the bullet points for each element to enable teachers to see a logical progression of knowledge, skills and dispositions across the junctures.

#### Links to learning areas

### Way forward

- Ensure tagging is explicit: the general capability must be clearly identifiable with a content description within the pop-up box.
- Explain that the tags are examples only.
- Ensure practical and effective examples are provided in each learning area to support teacher understanding of this general capability.

## Personal and social competence

### Strengths

- The elements are effective organisers and are consistent with the work of the Collaborative for Academic, Social and Emotional Learning (CASEL), incorporating such concepts of self-awareness, self-management (personal competence), social awareness and social management (social competence).
- The conceptual statement clearly promotes the view that Personal and social competence is an aspect of learning in all learning areas.
- Theoretically, the Elements of Personal and social competence are clearly articulated.
- This general capability is considered essential in an effective early childhood program. A child's view of themselves and their ability to relate to others influences their capacity to function effectively in the social environment of school and therefore engage fully in the learning presented through social contexts in school. Emphasis could be made on recognition of diversity (with a focus on disability) in this area.

### Concerns and issues

#### Conceptual statement

- Values and beliefs are absent. Teaching and assessing this general capability in isolation from an understanding of values and belief systems was a concern regularly stated.
- The use of the term “competence” is value-laden in a multicultural society. The term “practices” may be a more neutral term that is not a modifier.
- Aboriginal and Torres Strait Islander commitment to “community” and “country” could be captured purposefully within the general capability. All four elements have a relationship with these commitments.
- The relationship between the Australian Curriculum: Health and Physical Education (Phase 3) and the general capability for Personal and social competence needs to be clarified. This draft continuum suggests that many of the descriptions for Personal and social competence would relate to the Australian Curriculum: Health and Physical Education.
- While it is acknowledged that there is an opportunity to cater for this general capability in all learning areas, teachers will need examples of this at each juncture level. There needs to be a better identification of what to teach in the capability. Note, at the time of writing there was no tagging of this general capability with the Mathematics content descriptions.
- Team skills and collaboration need to be stronger in the elements and should be evident from the earliest juncture.
- Many teachers of students with disability, such as an autism spectrum disorder, are challenged by the language and descriptions.

#### Continuum

- There is a need for a Prior to Foundation juncture for students with a disability.

- Many schools have programs on social and emotional wellbeing already in place. The descriptions for Personal and social competence do not give enough direction for schools to update these programs until they implement the Australian Curriculum: Health and Physical Education.
- Assessment of Personal and social competence was debated with most favouring monitoring. This was based on concerns raised about teacher capacity to assess morals and values, a student's self-awareness and so on. There is a general view that the descriptions are not necessarily measureable and that assessment of these descriptions will cause concern for many educators and parents. Specific concerns raised included:
  - How do teachers determine that students are making a realistic assessment of their own abilities? (By the end of Year 10: Self-awareness)
  - How do teachers measure transfer of knowledge into students' personal lives? (By the end of Year 10: Self-awareness)
  - How do teachers monitor how students are applying learning from school in their personal lives? (By the end of Year 6: Self-awareness)
  - Should teachers (not counsellors) be encouraging Year 2 students to recognise and describe possible causes of conflict at home? (Social management)
- As values and beliefs are not built into this general capability, planning for teaching and assessment will challenge all educators.
- Technical language used in the descriptions may make the ideas of Personal and social competence less accessible to teachers who do not have specialist knowledge or training in health. It is important that this information is presented in straightforward language to support curriculum planning, teaching and learning.
- Some of the general capability descriptions are quite complex and vague but the format is appropriate.
- Alignment and sequencing in the continuum are not always evident, and it is sometimes difficult to follow the conceptual thread.
- The general capability descriptions for Year 10 seem complex and quite ambitious (even for adults) and it is unclear what further development is expected during Years 11–12.
- Occasional use of competency based terms like “demonstrate” and “show” rather than cognitive or developmental terms caused some concern, particularly when no explanation is provided as to why this has occurred.
- Special educators were concerned that while this is an extremely important general capability for many students with disabilities, it cannot become the pseudo-curriculum for the Prior to Foundation levels.
- Many students with an autism spectrum disorder or from other cultures may have difficulty demonstrating many of the indicators within the general capability.
- It is not appropriate for students by the end of Year 2 to be “ ... describing possible causes of conflict at home ... ” as this may be a highly sensitive area for some children. For young children it would be more appropriate to look at the causes of conflict in “the school playground, playing with friends”.

### Way forward

#### Conceptual statement

- Include information explaining how values and beliefs inform perceptions of personal and social competence.



- Consider using an alternative modifier than “competence”. “Practices” may be a more neutral choice.
- Ensure Aboriginal and Torres Strait Islander perspectives are included purposefully. For example, include “community” as central to the model that integrates the four elements.
- Ensure language is inclusive and reflects the needs of the special education community.
- Provide statements that connect this general capability with Health and Physical Education, in a similar manner that the Information and communication technology (ICT) competence was linked with the Technology learning area.

#### **Continuum**

- Place a By the end of Foundation juncture to cater for the needs of students with a disability. This is a key equity issue.
- Write descriptions in two-year junctures.
- Provide clear advice as to assessment noting the challenges and difficulties of this for teachers.
- Ensure the descriptions are simply stated with minimal use of technical language. Include a glossary to support teachers to access the continuum more effectively.
- Ensure team skills and collaboration are emphasised across the continuum.
- Review the continuum to develop greater alignment to show the sequence of learning, particularly conceptual development.
- Include specific examples of how these general capabilities are included in learning areas.

#### **Editorial suggestions**

- Change the term “self-esteem” used in the continuum for By end of Year 10 to the term “self-worth”, which is used in the conceptual statement for consistency of language. The description should read “how it impacts and enhances their self-worth, self-confidence ... ”
- Broaden the description in By end of Year 10 (Self-awareness) to include their membership of different groups: “ ... identifying personal characteristics that contribute to or limit their effectiveness as learners and friends”.
- Broaden the description in By the end of Year 6 (Social awareness): “They recognise the differences between positive and negative relationships” to include “ ... they recognise the impact of positive and negative behaviours on relationships”.

#### **Links to learning areas**

- Ensure tagging is explicit: the general capability must be clearly identifiable with a content description within the pop-up box.
- Explain that the tags are examples only.
- Ensure practical and effective examples in each learning area support teacher understanding of this general capability.

## Ethical behaviour

### Strengths

- Developing student understanding and application of ethics is valued by Queensland educators. This is a significant opportunity to immerse students in the concepts described in the Ethical behaviour general capability.
- The concepts included within this general capability are expansive and include morals, values, virtues, reasoning, judgment and philosophy.

### Concerns and issues

#### Conceptual statement

- The *Melbourne Declaration on Educational Goals for Young Australians* committed to supporting young Australians to become active and informed citizens. It identified as key attributes the capacity to “act with moral and ethical integrity” and commitment “to national values of democracy, equity and justice”. The focus of the general capability of Ethical behaviour represents only a small portion of the knowledge, skills, values and dispositions needed for development of active and informed citizenship. A general capability focused on active citizenship inclusive of civic values would deliver more to the realisation of this goal.
- The description of Ethical behaviour is too focused on morality and moral judgment rather than the civic values foregrounded in the Melbourne Declaration. There is concern that “morals” and “ethics” are used interchangeably. Burgh, Field and Freakley (2006) in *Ethics and the Community of Inquiry: Education for deliberative democracy*, clearly differentiate between values and ethics. They state that “... ethics is derived from the Greek *ethos* meaning ‘character’ and ‘morality’ comes from the Latin word *moralis* which means ‘customs of manners’”. They further surmise “... that ethics pertains to the character of persons and the wider society, whereas morality is about the relationships among humans or the practices of a people”.<sup>2</sup>
- Given Australia’s culturally diverse school communities, a focus on understanding shared civic values could be more appropriate.
- The use of the term “behaviour” in the title has been challenged by many educators due to its implications for teaching and assessment.
- A clearer justification of why Ethical behaviour has been identified as a general capability is needed.
- Boundaries of what is virtuous and moral pose challenges for teachers. Whose values or morals are valued here? Is there an identifiable and agreed list of “common values” and “common virtues”?
- The conceptual statement does not clearly differentiate between ethical and moral frameworks, and uses the terms “ethics” and “morals” interchangeably.
- Australian classrooms typically reflect a range of moral backgrounds and cultural influences, thereby affecting the capacity of teachers to develop student capacity to negotiate and assess moral judgments.

---

<sup>2</sup> Burgh, GB, Field, T & Freakley, M 2006, *Ethics and the Community of Inquiry: Education for deliberative democracy*, Thomson Social Science Press, Melbourne.

- There needs to be more text for teachers explaining that an ethical, democratic society expects virtues to be not only valued but enacted — students need to recognise how, when, and where virtues are exhibited by people known to them (family, friends) or in the broader community (sport, politics, arts). Students need to be aware of an individual's need to demonstrate the virtues they expect to see in others, the interplay between the personal and societal must be emphasised, and the enactment of personal virtues and their influence on others.
- The theoretical underpinnings of Ethical behaviour are complex and need dedicated teaching time. Ad hoc learning experiences will not deepen student knowledge and develop capacity to use and apply ethical frameworks.
- For this general capability to be effectively embedded in practice, teachers require adequate professional knowledge in facilitating philosophical discussions, asking open-ended questions and encouraging students to support positions with justifications. Teachers will need to display the same knowledge, skills and dispositions of Ethical behaviour being expected of their students.
- Developing students' understandings of “worldviews” and how to work with them is not included.

### Across the curriculum

- The Ethical behaviour general capability is an ambitious statement and, if every Australian student were to be immersed in the kinds of ideas and experiences it describes, the benefit to Australian society would be immeasurable. Unfortunately, there is little likelihood that this will occur if Ethical behaviour remains a general capability to be developed through the learning areas. An application of the filter for general capabilities reveals that opportunities for the Ethical behaviour general capability to be developed are extremely limited. As is the case with Critical and creative thinking, those limited opportunities that have been identified are opportunities for the application of concepts or skills that are not explicitly taught.
- The Ethical behaviour general capability involves extensive knowledge and content that will not be developed incidentally through the other learning areas. The content described in the continuum would comprise at least one semester's study in the current Queensland senior Philosophy and Reason subject.
- Assessment of Ethical behaviour was debated with most favouring a monitoring perspective, if at all. Multiple concerns were raised about teacher capacity to assess Ethical behaviour. There is a general view that the descriptions are not necessarily measurable on a continuum. Assessment of these descriptions will cause concern for many educators and parents. Concerns included:
  - the ambitious nature of descriptions. For example By the end of Year 2 (Knowledge of accepted values and ethical principles):  
Students are aware of the relevance of a range of values and ethical principles and identify issues that can arise when resolving moral problems.
  - assessing complex and values-based descriptions By the end of Year 6 (Knowledge of accepted values and ethical principles):  
Students recognise that using values and ethical principles to resolve moral problems is rarely simple and use specific examples to explain the role that values and principles play in moral decision making and the issues that may arise.
  - comprehending descriptions. For example By the end of Year 10 (Understanding ethical concepts and recognising the moral domain):

Students use contexts from the learning areas to support generalised statements about concepts (such as justice) and concerns (such as freedom of speech).

- The description of Ethical behaviour would be better accommodated in a subject, such as Civics and citizenship, where it can be developed in a clear sequence over time rather than added onto a range of learning experiences within a learning area or across a range of learning areas.
- It is not clear how some of the complex ideas referred to in the conceptual statement can be taught in a developmental way or as part of learning experiences across learning areas. A statement on how it can be developed in specific learning areas, including the subject of Civics and citizenship, is also needed.
- Teachers without specialist knowledge of ethics will find it difficult to plan for and teach Ethical behaviour using definitions from the conceptual statement.
- Some direction should be provided on how Ethical behaviour links with the cross-curriculum priorities.
- The theoretical framework is not a framework but does describe a range of theories and concepts underpinning ethical study. This information is described in ways more relevant to secondary educators.
- The theoretical framework is not inclusive of Aboriginal and Torres Strait Islander perspectives.

## Continuum

- Three junctures do not provide enough scaffolding for all students.
- The third element of Ethical understanding as proposed in the continuum (Engagement in reasoned moral decision making) has considerable overlap with Critical and creative thinking. This is both natural and desirable. However, it underscores the need for these concepts to be explicitly taught. For example, in By the end of Year 10, students are expected to:

“ ...avoid common fallacies in reasoning and attend to logical consequences of claims ... ”

However, the learning areas do not explicitly teach these concepts, and the general capabilities statements do not explain what the “common fallacies in reasoning” are, or what “logical consequences” the students are supposed to know.
- Philosophical approaches should be evident in the descriptions and, therefore, influence approaches to teaching and learning.
- The structure of the continuum is not even and there is too much focus on morality and moral judgment.
- As the elements do not capture knowledge, skills and processes, the continuum is not clear or developmental.
- It is not clear how students will deepen their knowledge of ethics, make and justify decisions, and apply ethics to a range of known and unknown situations or issues.
- This is an important general capability for students with disabilities but special educators are concerned about how students with an intellectual disability and students with an autism spectrum disorder would develop ethical behaviour. Some students with disabilities have difficulty with time sequencing, timeline recognition, and cause and effect. Underpinning many of the general capability descriptions is the underlying ability to recognise cause and effect and for metacognition prior to action of the effects resulting from choices of actions by the individual. These are aspects that should be

given considerable thought so that they can be incorporated into the Prior to Foundation levels.

- Early childhood educators support this approach to ethical and moral thinking and action. The continuum is supported. The general capabilities outlined, while supported, also present challenges for teachers in assessing children's understanding and application. The values-based general capabilities are dependent on the degree to which they are modelled, valued and encouraged in the classroom. There is the possibility that artificial constructs will be put in place in classrooms to address these general capabilities rather than applying ethical behaviour in real-world situations.

### Way forward

#### Conceptual statement

- Consider a focus on active citizenship rather than ethical behaviour which will be more accessible to teachers.
- Make clear the distinction between morals, ethics and values.
- Reconsider framing ethics within a structure of knowledge, skills and dispositions, rather than behaviours.
- Include Aboriginal and Torres Strait Islander perspectives within theoretical and conceptual explanations and the continuum where appropriate.

#### Continuum

- Place a By the end of Foundation juncture to cater for the needs of students with a disability. This is a key equity issue.
- Write descriptions in two-year junctures.
- Provide clear advice about assessment, noting the challenges and difficulties of this for teachers.
- Ensure the descriptions are simply stated with minimal use of technical language. Include a glossary to support teachers to access the continuum more effectively.
- Reframe the continuum to include more focus on civic values and philosophical principles and frameworks.
- Give more attention to sequencing key ideas and providing context or concrete examples.
- Align descriptions that expect students to "reason" as well as engage in "moral justification" with descriptions of a similar cognitive demand in Critical and creative thinking.
- Make the development of student understanding and the capacity to apply ethical principles more explicit.
- Simplify Ethical behaviour capability descriptions.
- Use the terms "ethics" and "morals" consistently.
- Ensure the conceptual statement and continuum aligns to the Australian Government's Assessment Domain of the National Assessment Program for Civics and Citizenship and the Values Education program.

#### Links to learning areas

- Ensure tagging is explicit: the general capability must be clearly identifiable with a content description within the pop-up box.
- Explain that the tags are examples only.
- Ensure practical and effective examples in each learning area support teacher understanding of this general capability.

## Intercultural understanding

### *Strengths*

- Developing student understanding of Intercultural understanding is valued by Queensland educators. This is a significant opportunity to immerse students in the concepts described in the general capability.
- The conceptual statement reflects current literature and is clearly stated.

### *Concerns and issues*

#### Conceptual statement

- The concepts of culture and variability within cultures and identity could be explored further.
- Successful teaching of Intercultural understanding requires opportunities in the curriculum to illustrate how it works and how a critical dimension can be applied to it in a particular context.
- The scope of Intercultural understanding does not state the integral connection between languages and culture.
- Inherent in the development of empathy is a focus on students' justifying their own decisions or actions.
- The diagram needs to show interrelationships between the six elements. It needs to be accessible to all teachers. Supporting text needs clarification.
- References to people from different linguistic and cultural groups should be expanded to acknowledge the necessary complementary behaviours of a shared interest in understanding and relating to one another (bullet point 2) or with an understanding that there are different ways of communicating, interacting and behaving.
- The integral connection between languages and culture needs to be foregrounded in the conceptual statement and then integrated more effectively through the continuum.
- The broader concept of diversity, to include disability, could be considered here.
- Aboriginal and Torres Strait Islander commitment to “community” and “country” could be captured purposefully within the general capability.
- Links to all cross-curriculum priorities are possible and should be considered.

#### Across the curriculum

- Intercultural understanding is a difficult concept to embed across the curriculum, and it will be a challenge to teach effectively for generalist teachers and teachers who have not engaged with intercultural language learning.
- Teachers of Languages will be better placed to teach this capability effectively, due to their familiarity with its inclusion in syllabus documents and their access to professional learning. Therefore Intercultural understanding needs to be supported by explicit reference in content descriptions to show where it can be taught in learning areas other than Languages. For example, in the Humanities and the Social Sciences, English and the Arts.

- Early childhood and special educators have noted the interrelatedness of Personal and social competence, Ethical behaviour and Intercultural understanding. There is potential to treat these differently from the other general capabilities.

## Continuum

- Emphasis should move from students expressing “empathy” and “respect” to a focus on how they make decisions and justify their choice of language and behaviour.
- Interacting, reflecting and empathy are elements of Intercultural understanding that many students with an intellectual impairment and students with an autism spectrum disorder will find challenging.
- Some of the “knowledge, skills and dispositions” outlined in the elements seem to lack the focus of the conceptual statement. The expectations in By the end of Year 10 could be more challenging for students. For example, in Interacting students are expected to “identify” and “consider”. At this year level, students could be expected to “think critically”, and ways for students to “act positively in unfamiliar contexts” could be further explored.
- Links to the Critical and creative thinking general capability — through the Reflecting element — provide avenues for deeper thinking into intercultural issues than “intercultural encounters”. Teachers would make meaningful links to the literacy and critical literacy components if the development of Intercultural understanding were defined through the use of critical thinking skills and the application of comprehension strategies such as:
  - activating prior knowledge
  - making connections
  - synthesising, reflecting and evaluating in response to spoken; written; digital and visual texts including literature, art, speakers, dance, culture, movies.

In this context, consideration could be given to renaming the elements “Recognising and appreciating” and “Interacting and reflecting.” In some school communities, interaction will be through texts and digital interaction. Personal interaction is often limited, so the term “interaction” may need to be broadened. These elements should be addressed together to prevent a focus on “recognising” and “learning about” other cultures rather than “learning from and with” other cultures.

- Early childhood educators support the approach to Intercultural understanding as outlined. Developing children’s cultural competence is important. The general capability assumes that teachers also have a strong sense of cultural competence. Professional development in the area of cultural competence will be required.
- The descriptions of the knowledge and skills in By the end of Year 2 are appropriate.
- The description of the knowledge and skills in By the end of Year 6 and By the end of Year 10 are very broad, which may lead to superficial teaching. They need to be more specific.
- Some of the descriptions are too aspirational.
- Descriptions for Year 6 and By the end of Year 10 need to more effectively signal connections to relevant learning areas where content descriptions deliver learning for this general capability.
- Concern is expressed with presenting social justice issues and intercultural issues together as this may diminish their integrity.

- Appropriate methodological language should be used. For example, in By the end of Year 2 (Interacting):  
 “Students respond positively to stories and encounters that represent a range of cultural perspectives”.  
 It will be difficult for teachers to quantify “react positively”.
- Some descriptions raise concerns about how teachers would monitor the learning of students or make judgments on student positions. For example:
  - in By the end of Year 10 (Interacting):
    - more specific direction is needed about “appropriate communication conventions in intercultural encounters”. Consider using “They are able to compare similarities and differences between their own communication conventions and that of other cultures to inform choices in intercultural encounters”.
  - in By the end of Year 10 (Reflecting):
    - how students will demonstrate open-mindedness on a range of issues is problematic in “They demonstrate open mindedness to the positions of others”.
  - in By the end of Year 6 (Empathy):
    - how students demonstrate sensitivity will be difficult in “Students demonstrate sensitivity to the feelings and needs of others. They ask ‘How do I imagine others might feel?’”
  - in By the end of Year 6 (Responsibility):
    - how students demonstrate their contribution to the development of positive relationships will be problematic in “Students contribute to the development of positive relationships between people from different cultural groups with whom they interact”.

## Way forward

### Conceptual statement

- Clarify the relationship between understanding what culture is and intercultural understanding in the theoretical framework definition of “culture”.
- Review the content descriptions so that they provide stronger and more explicit references to the general capability to inform teaching practice. A few clear and targeted descriptions of the capability will be more effective than many vague references.
- Provide a more explicit explanation about the process of reflection and how it is to be taught.

### Editorial suggestions

- In the conceptual statement:
  - use a stem such as, “Australian students need to recognise characteristics of their “own” or Australian culture”.
- In the element of Recognising:
  - include a statement such as, “Students understand and recognise that they themselves have a culture”
  - further clarification may be needed to distinguish between Australian culture or heritage speakers’ cultures
  - consider including “language” in the paragraph on Recognising. For example, “Recognising involves students identifying, observing and describing increasingly sophisticated characteristics of their own language and cultures and the language and cultures of others”
  - include a statement foregrounding the integral connection between language and



## Way forward

- include a statement such as, “Language carries cultural information”
- include a statement such as, “Students recognise how and why language changes according to audience, mode and medium”
- include a statement such as, “Students recognise how language can include people in a culture by providing invisible cultural messages and deeper meanings in words and phrases”.
- In the element of Interacting, revise text to reflect more accurately what needs to be achieved. For example:
  - paragraph 2 should state: “Students are encouraged to appreciate other perspectives”. This does not mean students are expected to abandon their own beliefs and values but to recognise them as representing particular perspectives.
  - paragraph 3 should state: “Interpreting involves ‘standing between’ cultures — being able to understand and interpret one’s own culture in ways that someone less familiar with it will understand, and having the skills to interpret the culture of others to members of one’s own cultural group”.
- In the element of Reflecting, revise text to reflect more accurately what needs to be achieved. For example:
  - paragraph 2 should state: “Intercultural learning encourages students’ interest in the lives of others. It provides opportunities to develop values and dispositions such as curiosity, openness, empathy, reciprocity, respect and responsibility that guide students in acting with intercultural understanding. In this continuum, three of these — empathy, respect and responsibility — have been selected as markers of intercultural understanding.”
- In the element of Respect, revise text to reflect more accurately what needs to be achieved. For example:
  - bullet point 3 should state: “understand that ways of demonstrating respect and its significance vary between linguistic and cultural groups”.
- In the element of Responsibility, revise text to reflect more accurately what needs to be achieved. For example:
  - bullet point 1 should state: “ ... demonstrate an understanding of the significance of and capacity to show reconciliation between Aboriginal and Torres Strait Islander Peoples and other Australians”.

## Continuum

- Write the continuum in two-year junctures.
- Place a By the end of Foundation juncture to cater for the needs of students with a disability, especially in the elements of Interacting, Reflecting and Empathy that accommodate the learning needs of students with intellectual disability and students with an autism spectrum disorder.
- Provide clear advice about assessment, noting the challenges and difficulties of this for teachers.
- Ensure the descriptions are simply stated with minimal use of technical language. Include a glossary to support teachers to access the continuum more effectively.

The following are editorial suggestions for the Intercultural understanding continuum.

- In By the end of Year 6 (Recognising) use:
  - Recognise and compare different ways of communicating, interacting and behaving.
  - Recognise and analyse in simple ways how people relate to each other through their use of language, and that this language carries cultural information.
- In By the end of Year 10 (Recognising) use:
  - Recognise that there is not one normative homogeneous culture within each country or society.
  - Recognise that ideas and information may or may not be easily transferable from language and culture to another and that this may provide insights and information about the culture.

## Way forward

- In By the end of Year 10 (Interacting) use:
  - Understand how values, attitudes and beliefs are conveyed through language and behavioural conventions.
  - Compare similarities and differences between their own communication conventions and that of other's cultures to inform choices in intercultural encounters.
  - Identify and analyse how language works as a structured system, a cultural practice and a communicative process.
- In By the end of Year 6 (Reflecting) use:
  - Reflect on their own cultural values, attitudes and beliefs and how other cultures may perceive them.
- In By the end of Year 10 (Reflecting) use:
  - Reflect on and evaluate how differences between their own language and culture and that of another may impact on communication in cross-cultural situations.
  - Interpret information about cultural values, attitudes and beliefs to make informed decisions about how best to handle cross-cultural encounters, justifying and reflecting on the consequences of their choices.
- In By the end of Year 6 (Empathy) use:
  - Identify how they or a peer from another culture would feel and respond to aspects of each other's culture.
- In By the end of Year 10 (Empathy) use:
  - Consider questions such as, What would be the consequences if I choose this language or behaviour with a person from another culture? Knowing this, will it affect my choices?
- In By the end of Year 6 (Respect) use:
  - Understand that when people from different cultures get to know each other they can both respect each other's ways and learn from each other.

### Links to learning areas

- Include an explicit statement identifying the learning areas where the teaching of Intercultural understanding is most appropriate and practical.
- Include explicit reference in some content descriptions that show how Intercultural understanding can be taught in learning areas other than Languages. For example, Humanities and the Social Sciences, English and the Arts.
- Revise to ensure Intercultural understanding is explored through the learning areas within Humanities and Social Sciences.
- Ensure tagging is explicit: the capability must be clearly identifiable with a content description within the pop-up box.
- Explain that the tags are examples only.
- Provide practical and effective examples in each learning area to support teacher understanding of this general capability.

## Appendix A: Numeracy references

- Geiger, V, Goos, M, & Dole, S 2011, "Teacher professional learning in numeracy: Trajectories through a model for numeracy in the 21st century", in J Clark, B Kissane, B Mousley, T Spencer & S Thornton (eds.), *Shaping the Future of Mathematics Education (Proceedings of the 33rd annual conference of the Mathematics Education Research Group of Australasia)*, vol. 1, pp. 297–305, MERGA, Fremantle, Australia.
- Goos, M, Geiger, V, & Dole, S 2010, "Auditing the Numeracy Demands of the Middle Years Curriculum", in L Sparrow, B Kissane & C Hurst (eds.), *Shaping the Future of Mathematics Education (Proceedings of the 33<sup>rd</sup> annual conference of the Mathematics Education Research Group of Australasia)*, pp. 210–217, MERGA, Fremantle, Australia.
- Hoyles, C, Wolf, A, Molyneux-Hodgson, S, & Kent, P 2002, *Mathematical Skills in the Workplace: Final Report to the Science, Technology and Mathematics Council*. Foreword and Executive Summary. Institute of Education, University of London; Science, Technology and Mathematics Council, London.
- Human Capital Working Group, Council of Australian Governments 2008, *National Numeracy Review Report*, accessed 12 January 2010, <[www.coag.gov.au/reports/docs/national\\_numeracy\\_review.pdf](http://www.coag.gov.au/reports/docs/national_numeracy_review.pdf)>.
- Jablonka, E 2003, "Mathematical literacy", in A Bishop, MA Clements, C Keitel, J Kilpatrick & F Leung (eds.), *Second International Handbook of Mathematics Education*, vol. 1, pp. 75–102, Kluwer: Dordrecht, The Netherlands.
- Jorgensen Zevenbergen, R 2011, "Young workers and their dispositions towards mathematics: Tensions of a mathematical habitus in the retail industry", *Educational Studies in Mathematics*, vol. 76, no. 1, pp. 87–100.
- Malloy, C 2002, "Democratic assess to mathematics through democratic education: An introduction", in L English (ed.), *Handbook of international research in mathematics education*, pp. 17–25, Lawrence Erlbaum: Mahwah, NJ.
- Muir, T 2008, "Principles of practice and teacher actions: Influences on effective teaching of numeracy", *Mathematics Education Research Journal*, vol. 20, no. 3, pp. 78–101.
- Noss, R, Hoyles, C, & Pozzi, S 2000, "Working knowledge: Mathematics in use", in A Bessot & J Ridgeway (eds.), *Education for mathematics in the workplace*, pp. 17–35, Kluwer: Dordrecht, The Netherlands.
- Steen, L, Turner, R, & Burkhardt, H 2007, "Developing Mathematical Literacy", in W Blum, PL Galbraith, H-W Henn & M Niss (eds.), *Modelling and Applications in Mathematics Education*, pp. 285–294, Springer: New York.
- Zevenbergen, R 2004, "Technologizing Numeracy: Intergenerational Differences in Working Mathematically in New Times", *Educational Studies in Mathematics*, vol. 56, no. 1, pp. 97–117.

---

## **Queensland Studies Authority**

154 Melbourne Street, South Brisbane

PO Box 307 Spring Hill

QLD 4004 Australia

**T** +61 7 3864 0299

**F** +61 7 3221 2553

**[www.qsa.qld.edu.au](http://www.qsa.qld.edu.au)**

---