Australian Curriculum K(P)–10 trial

Feedback from Queensland schools

July 2010





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Executive summary

From March to May 2010, 19 Queensland schools participated in a trial of the draft Australian Curriculum K(P)–10 in English, mathematics, science and history.

In a meeting organised by the Queensland Studies Authority (QSA), representatives from the schools provided feedback on the trial and identified key strengths and challenges of the Australian Curriculum.

Content

Strengths identified by the trial schools included:

- content was recognisable and generally aligned with the current Queensland curriculum
- explicit content will help teachers ensure that the specialised knowledge in each learning area will be taught
- inclusion of inquiry in the strands and content descriptions across learning areas reflects
 Queensland's current commitment to developing higher-order thinking.

Challenges identified by the trial schools included:

- overload of content and the time requirements to teach content
- lack of clear framing principles to guide depth of treatment and scope of content
- lack of internal consistency and developmental sequence in the content descriptions
- year-by-year approach that will impact on teaching in multi-age or composite classrooms.

Achievement standards

The K(P)–10 draft Australian Curriculum achievement standards caused the most concern and the greatest number of requests for professional development and advice. Concerns focused on:

- limited alignment with the content descriptions
- lack of consistent structure between and within learning areas
- lack of clear guidance as to their application.

Professional learning and resources

Representatives from the trial schools recommended a range of resources and projects to support implementation of the Australian curriculum; they also outlined principles to guide the development of professional learning and resources by the QSA in collaboration with the schooling sectors. The teachers and school leaders indicated that the following will be necessary to support effective implementation of the Australian Curriculum in a Queensland context:

- a suite of quality-assured planning resources and exemplars, located centrally
- advice and support about the alignment of teaching and learning, assessment and reporting
- resources and advice to support:

- students who will transition to the Australian Curriculum without all the required prior knowledge at their year level, particularly in mathematics
- teachers working with Queensland and Australian Curriculum documents simultaneously
- teachers without the necessary disciplinary knowledge, particularly in science and history, but also in aspects of English
- an overarching document that shows the alignment between the ACARA documents and QCAR, including a glossary with ACARA terminology.

Across the learning areas, trial schools also identified "hot spots" or areas in the curriculum that should receive particular attention during the transition to the K(P)-10 Australian Curriculum.

1. Introduction

From March to May 2010, 19 Queensland schools participated in a trial of the draft Australian Curriculum K(P)–10 in English, mathematics, science and history.

The focus of the trial was to evaluate and gather feedback on the draft curriculum. In addition, trial schools provided the Australian Curriculum, Assessment and Reporting Authority (ACARA) with draft term, semester, or year-long teaching programs or units of work, at least two assessment tasks and some associated student samples. Queensland schools that trialled the K(P)–10 Australian Curriculum and the learning areas they undertook are listed in the appendix.

During the trial the Queensland Studies Authority (QSA) supported schools and worked with ACARA. As part of this support, the QSA convened two meetings of the trial schools. The first meeting, at the beginning of the trial in March, focused on identifying issues for broader implementation of the curriculum in Queensland and professional development needs.

The second meeting, held on 4 June 2010 after the trial had concluded, reviewed the outcomes of the trial. The meeting was attended by 62 education professionals, including:

- 51 teachers and school leaders from 18 of the 19 Queensland trial schools
- 4 representatives from ACARA
- 5 observers from Education Queensland (EQ)
- 1 observer from the Queensland Catholic Education Commission (QCEC)
- 1 observer from Independent Schools Queensland (ISQ).

The day was organised into three sections:

- introduction from the Deputy Director, Teaching and Learning, QSA, and overview of the major trends from national feedback by Tony Kitchen, Manager, ACARA
- three workshops facilitated by QSA officers:
 - a focus on content
 - a focus on achievement standards
 - professional development and resources
- plenary session to summarise key issues emerging from the trial and to identify professional development and implementation support.

2. A focus on content

2.1 Summary

Content in the Australian Curriculum refers to knowledge, skills and processes that should be taught to all young Australians. The components of the Australian Curriculum that are defined as content include:

- rationale
- aims
- content descriptions (divided into strands)
- elaborations.

Across all learning areas there were common strengths and challenges identified by teachers trialling the content of K(P)–10 Australian Curriculum in Queensland schools.

Strengths

- A common and explicit national starting point for curriculum planning is a step towards improving perceptions about national consistency.
- High expectations inherent in the content are beneficial to all students, e.g. in English, the inclusion of literature and an explicit focus on grammar.
- The elaborations are useful in illustrating content and were considered essential to ensure that quality learning outcomes would be achieved in English and mathematics
- Other strengths include the alignment with quality Queensland practice and the use of strands such as proficiencies in mathematics, inquiry in science and history, and the general scope of content in English.

Challenges

- There is generally too much content, notably in mathematics, history in Years 7–10, science in Years 7–10, and the range of texts in English; this will impact on the feasibility of implementing the whole curriculum.
- The year-by-year structure and content-specific topics in each year will provide significant challenges to multi-age learning contexts, particularly in science and history.
- The lack of a clear framework using common terminology across the key learning areas will impact on teachers' ability to coherently sequence content descriptions.

Strengths and challenges identified for specific learning areas are detailed in the following.

2.2 English

Strengths of the draft content implemented during the trial of K(P)–10 English included:

- organisation into the three strands of Language, Literature and Literacy, which ensured a balance in the program
- elaborations, which were essential as they clarified the descriptors and allowed for easier interpretation of the content

- strong focus on language and grammar, including functional, traditional and visual grammar
- a shared common understanding between all sectors and all states of what should be taught at each year level
- embedding of information and communication technologies (ICTs) into English content.

Challenges that emerged from trial schools using the draft K(P)–10 English content included:

- lack of consistency in the content descriptor headings, which may impact on multi-age or composite classroom settings
- overload of content in each year level and increased complexity and demand in the content, which will impact on the time requirements to teach the content
- mismatch between the strands, content descriptors and modes
- design of the online document, which made it difficult to see the progression from one year to the next.

2.3 Mathematics

Strengths of the draft content implemented during the trial of K(P)–10 mathematics included:

- proficiency strands well matched with the current Queensland documents
- elaborations generally useful in interpreting the content descriptors
- content generally achievable within the year levels
- continued focus on creative thinkers and problem solvers
- potential for a nationally consistent approach.

Challenges that emerged from trial schools using the draft K(P)–10 mathematics content included:

- lack of sequencing across year levels with strands not always built upon or sequenced appropriately
- lack of specificity, particularly in some elaborations, resulting in lack of clarity about what must be taught
- some topics not suitable for all students in the year level.

2.4 **Science**

Strengths of the draft content implemented during the trial of K(P)–10 science included:

- potential to integrate into other areas of the curriculum
- organisation of the document into strands *Inquiry skills*, *Science as a human* endeavour and Science understanding
- content could be well supported by the PrimaryConnections program and resources¹
- secondary year-level content similar to what is currently taught in Queensland schools
- potential for nationally consistent approach..

Challenges that emerged from trial schools using the draft K(P)-10 science content included:

- some content over-represented in some year levels and missing in others
- lack of resources to implement various topics
- difficulty of teaching multi-age or composite classrooms with content set out by year level
- time requirements to teach content.

2.5 **History**

Strengths of the draft content implemented during the trial of K(P)-10 history included:

- solid scope and sequence
- succinct and useful descriptors and elaborations
- enables the use of inquiry processes
- ability to integrate with English.

Challenges that emerged from trial schools using the draft K(P)-10 history content included:

- too much content to cover within the timeframe given
- limited time to explore deep understandings or big concepts
- content overlap and placement, especially in Years 7-8
- need for teacher training in the content area
- lack of quality resources to implement the curriculum topics
- time requirements to teach content.

¹ Developed by the Australian Academy of Science and the Australian Government Department of Education, Employment and Workplace Relations < www.science.org.au/primaryconnections>.

3. A focus on achievement standards

3.1 Summary

The K(P)–10 draft Australian Curriculum achievement standards caused the most concern and the greatest number of requests for professional development and advice.

It was acknowledged that in an eight-week trial it was difficult to evaluate end-of-year achievement standards accurately and that multiple work samples would be essential to develop a thorough understanding of the achievement standards.

The key concerns regarding the achievement standards included:

- design issues, including:
 - lack of internal consistency in the structure within the standards, across year levels
 and across key learning areas, e.g. the organisation of the achievement standards
 using modes in English but strands in other learning areas. This inconsistency will
 make it difficult for teachers to use the standards, especially in primary schooling
 - standards written as a summary which may be useful, but makes them difficult to use when developing criteria for assessment
 - use of "teacher language", which would not be user-friendly for other stakeholders such as parents/carers
- purpose: the standards are broad lists of content with limited or inconsistent qualitative indicators to provide guidance about the quality of student learning
- application: there is little or no clear direction about how to apply the standards. The following issues were raised:
 - lack of descriptions for A–E achievement standards
 - lack of clarity about whether standards are typical or cut-off
 - uncertainty about whether students must demonstrate achievement in all descriptors within the standards
 - need for exemplars of student work that show A–E standards.

Issues regarding the design, purpose and application of achievement standards in the specific learning areas were raised and are summarised in the following.

3.2 English

The key concerns regarding the design of the English achievement standards included:

- lack of clarity to assist in making judgments/reporting, as the standard was more like a summary of content for each year level
- need for A–E standards instead of a generic statement for each year level.

3.3 **Mathematics**

The key concerns regarding the design of the mathematics achievement standards included:

- standards were not useful for developing assessments
- standards were more like objectives than standards.

Science 3.4

The key concerns regarding the design of the science achievement standards included:

- lack of alignment with the rationale and aims
- need for annotated student work samples to make judgments on student work.

3.5 **History**

The key concern regarding the design of the history achievement standards was:

· need for greater refinement for clarity.

Professional learning and resources 4.

Summary 4.1

Teachers and school leaders were asked to reflect on using the draft K(P)-10 Australian Curriculum and their approaches to planning. In response to these experiences they were asked to consider what professional learning and resources would support their effective implementation of the K(P)-10 Australian Curriculum.

Representatives from the trial schools recommended a range of resources and projects; they also outlined principles to guide the development of professional learning and resources by the QSA in collaboration with the schooling sectors.

In addition to specific learning area resources, the need for an overarching document that showed the alignment between the ACARA documents and QCAR, including a glossary with ACARA terminology, was mentioned.

4.2 **Teachers**

Teachers recommended the following practical resources available online to support planning, teaching and assessing using the K(P)-10 Australian Curriculum:

Planning

- Advice about the planning process from aims and objectives through to standards with examples of formats
- Advice about how to develop scope and sequences including exemplars
- Advice about developing units of work, including how to embed the general capabilities and Indigenous perspectives and the use of age-appropriate resources.
- Advice for teachers working with Queensland and Australian Curriculum documents simultaneously
- Advice for teachers in planning for students who will transition to the Australian Curriculum without all the required prior knowledge at their year level, particularly in mathematics

Teaching

- Professional development focused on inquiry learning
- English: scope and sequences for spelling and genre
- Mathematics: upskilling in content areas that are new in Year 7
- Science: upskilling, especially in content for non-specialist teachers
- History: source book with age-appropriate resources and content modules for aspects of history not commonly taught or to be taught in depth, especially for non-specialist teachers

Assessing

- Guidelines for assessment including task specifications, common assessment tasks and criteria for assessment
- Advice and exemplars that show clear alignment between current quality assessment practices and the use of the Australian Curriculum achievement standards, including assessment criteria A-E, using consistent language
- Advice about writing assessment criteria

4.3 School leaders

School leaders were seeking the following professional learning activities and resources to support effective transition to the Australian Curriculum:

- clear Queensland implementation plan
- comprehensive communication strategy including parents/carers and pre-Prep
- variety of approaches and delivery for professional development about the curriculum (podcasts, DVD with modules focused on specific aspects of the draft K(P)-10 curriculum, online conferencing, information sheets for use in communities and networks)
- support packages that cater for different sizes of schools, recognising that small schools without heads of departments require different support strategies to large schools
- scope and sequences, exemplars, annotated samples, and "road maps" such as the road map developed by EQ.

School leaders recommended the following principles to guide the development of professional development and resources to support schools to successfully implement the K(P)-10 Australian Curriculum:

- key resources located in one central place
- professional development that is explicit and practical and includes practitioners, i.e. the experiences of those who are working with the curriculum (including interviews with principals, curriculum leaders and teachers)
- expert points of contact, such as QCAR consultants, in each region, including metropolitan areas.

Curriculum hot spots 4.4

Across the learning areas, trial schools also identified hot spots or areas in the curriculum that should receive particular attention during the transition to the K(P)-10 Australian Curriculum. These included:

English

- Idioms, figurative language, multimodal texts, digital texts, grammar, visual grammar and multi-literacies; while these have always been part of Queensland documents, they are more explicit in metalanguage and expectations in the Australian Curriculum
- Content descriptions, which are not written as a scope and sequence

- Grammar components of the curriculum, which assume prior knowledge that may not have been covered in earlier years
- Creation of texts in the literacy strand in Year 9
- Greater breadth and depth required, e.g. history of English has not previously been addressed

Mathematics

- Algebra sophistication, which generally occurs a year earlier in the Australian Curriculum
- Year 9 circle work and theorem, a higher-level concept which may not be suitable for all students
- Index notation/laws, covered in Year 8 and 9, but not in Year 10. These should be in Year 9 and 10 to flow into senior years
- General capabilities, which need to be clarified and given a definite role
- Lack of scope and sequence
- Use of technical language, particularly in Years 6 and 7
- Concepts such as:
 - Year 1 location in Measurement and geometry
 - Year 2 time
 - Year 5 summary statistics and the use of the term "operators" in fractions
 - Year 7 linear equations
 - Year 8 area/circumference

Science

- Inquiry skills, which need to be explicitly taught
- Lack of prior knowledge of language (scientific literacy), e.g. the topic of force
- Graphing and data, specifically transferring data onto a graph
- Shortage of resources and activities in the area of earth science
- Energy, which needs to be understood before electricity is taught
- Changing materials, covered in Year 1 but unrelated to other concepts
- Concept of weather in Year 7, which is not connected to other learning and which students have difficulty distinguishing from climate

History

- The potential for doubling up of content, e.g. Chinese goldminers mentioned in Year 5 gold rush era and also in Year 6 migrant content
- All content areas could be potential hot spots if teachers are not resourced or trained in accurate teaching of history
- "Dry" content in Year 9, which could be a concern with this age group
- Too much content in What is history?, which could be developed in a similar way to Science as a human endeavour

Appendix — Trial schools and learning areas

Trial school	K(P)–10 Australian Curriculum learning areas
Burpengary State School	History
Cannon Hill Anglican College	English
Forest Lake State School	English, History, Mathematics, Science
John Paul College	English, History, Mathematics
Kawana Waters State College	Mathematics
Matthew Flinders Anglican College	English, History, Mathematics, Science
Milton State School	Science
Narangba State School	Science
Patricks Road State School	English, History
Sandgate District State High School	Mathematics
St Ambrose's School	English, History, Science
St Andrew's Catholic College	English, History
St Joseph's Catholic School	Science
St Joseph's Nudgee College	English, History
St Joseph's Tobruk Memorial School	English, Mathematics, Science
Sunshine Beach State School	Mathematics
Townsville Grammar Junior School	English, Mathematics, Science
Upper Coomera State College	English, Mathematics, Science
Western Cape College	English, Mathematics

